# Broome Community College | BCC

State University of New York

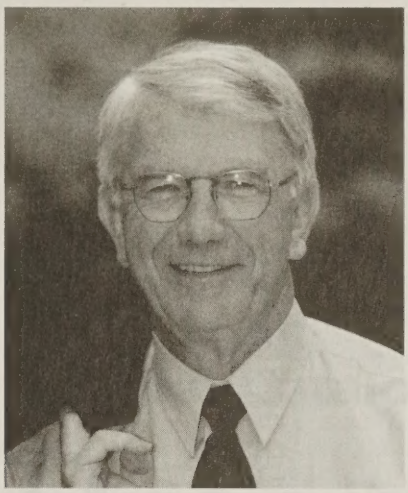


# General Catalog 2003-05

BROOME COMMUNITY COLLEGE
Where it all begins

ARCHIVES CATALOGS


Broome
Community
College
BCC
State University of New York
BROOME COMMUNITY C
1946
State University
of New York



# From the Desk of the President

Broome Community College offers a high-quality educational experience, providing you the opportunity to fulfill your goals and to reach your full potential. We have been doing this successfully for more than 50 years. Graduates from our institution have transferred and successfully proven their abilities in some of the finest universities and colleges in the United States. Successful graduates have gone on to hold important positions in major corporations throughout the country. We at BCC are very proud of our alumni and their accomplishments.

A major reason for our success in providing this quality education over the years has been an expert and highly dedicated faculty. A commitment to small class size, individualized attention, and special needs assistance, guarantees students the help they need in the classroom.

We feel that our students must have access to new technologies if they are to compete successfully in our global economy. With that belief, BCC can boast of having made a continuing major investment in modern technology and equipment.

BCC is also proud of its tradition of offering a variety of social, recreational, and fine arts activities. We encourage our students to participate in student assembly, athletics, clubs and other activities, and to enjoy the opportunity for a well-rounded education.

As you review the catalog, I think you will find that the programs of study we offer will allow for transfer to the university or college of your choice or for immediate entry into the work force. I urge you to contact our admissions office to obtain more specific information about the programs in which you have an interest.

We at BCC are proud of our tradition and feel that we can offer you a quality education at a reasonable cost. Come take a look at us.

Sincerely,

Donald A. Dellow

Donald A. Dellow
*President*

**TDD / TTY Telephones**

ACCESS Center .....778-5210
Admissions .....778-5001
Coordinator of
Interpreting Services .....778-5398
Registrar's Office .....778-5027
Student Accounts .....778-5230
Student Support Services .....778-5234
The Little Theatre .....778-5191

The College reserves the right at any time to make changes deemed advisable or necessary. The College, moreover, shall not be held responsible for any typographical errors contained in this catalog. For information about the College, its programs, and its admissions procedures, contact:

Office of Admissions
Broome Community College
P.O. Box 1017
Binghamton, New York 13902

Phone 607 778-5001

Hearing Impaired: 607 778-5150 (TDD/TTY)

Broome Community College

BCC

State University of New York

## 2003-2005 General Catalog

# Broome Community College

**A comprehensive Community College supervised by the State University of New York and sponsored by Broome County, New York**

**Broome Community College**
**P.O. Box 1017**
**Binghamton, NY 13902**

Phone: 607 778-5000

Outside Local Calling Area: 800 836-0689

TTY/TDD: 607 778-5150

FAX: 607 778-5310

URL: http//:www.sunybroome. edu

**Partners in Progress**

- Broome Community College
- State University of New York
- Broome County, New York

## Accreditation

Broome Community College is a member of the Middle States Association of Colleges and Schools, 3624 Market Street, Philadelphia, PA 19104-2680. Phone 215-662-5606.

The College is supervised by the State University of New York and its curriculums are registered by the State Education Department.

The Chemical, Civil, Electrical, and Mechanical Engineering Technology programs are accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology, (TAC/ABET), 111 Market Place, Suite 1050, Baltimore, MD 21202. Phone: 410-347-7700.

The Dental Hygiene Program is accredited by the Commission on Dental Accreditation, 211 E. Chicago Avenue, Chicago, IL 60611. Phone: 312-440-4653.

The Nursing Curriculum is accredited by the National League for Nursing Accrediting Commission, 61 Broadway, New York, NY 10006. Phone: 212-365-5555.

The Health Information Technology Program is accredited by the Council on Accreditation of the American Health Information Management Association, 919 N. Michigan Ave., Suite 1400, Chicago, IL 60611-1683. Phone: 312-787-2672, in collaboration with the Commission on the Accreditation of Allied Health Education Programs.

The Radiologic Technology Program is accredited by the Joint Review Committee on Education in Radiologic Technology, 20 N. Wacker Drive, Suite 900, Chicago, IL 60606-2910. Phone: 312-704-5300. Website: www.jrcert.org

The Medical Assistant Program is accredited by the Commission on the Accreditation of Allied Health Education Programs. The Medical Assistant Program is also accredited by the American Association of Medical Assistants, 20 N. Wacker Drive, Suite 1575, Chicago, IL 60606-2003. Phone: 800-228-2262.

The Physical Therapist Assistant Program is accredited by the Commission on Accreditation in Physical Therapy Education, 1111 N. Fairfax Street, Alexandria, VA 22314. Phone: 703-684-2782.

The Medical Laboratory Technology curriculum is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 8410 W. Bryn Mawr Avenue, #670, Chicago, IL 60631-3415. Phone: 773-714-8880.

The Dietary Program is approved by the Dietary Managers Association.

## Non-Discrimination Commitment

Broome Community College does not discriminate on the basis of race, sex, color, religion, age, national origin, disability, marital status, sexual orientation, or status as a disabled veteran or veteran of the Vietnam era in the recruitment or education of students; the recruitment and employment of faculty and staff; or the operation of any of its programs or activities. Where relevant, state and federal laws apply.

The designated coordinator for compliance with Title VI and VII of the Civil Rights Act of 1964, as amended, Title IX of the Education Amendments of 1972, and Section 402 of the Vietnam Era Veterans' Readjustments Assistance Act of 1974, as amended, is the Affirmative Action/Equal Opportunity Officer.

The designated coordinator for compliance with Section 504 of the Rehabilitation Act of 1973, as amended, is the Director of Student Support Services.

For further information or questions, contact the office weekdays, during regular College hours.

## Educational Rights and Privacy Act

The Family Educational Rights and Privacy Act of 1974, as amended, establishes specific rights for students and/or their parents and prevents the release of certain information without the written consent of the student. Generally, this federal law gives students, former students, and alumni the right to review, in the presence of college personnel, their own personal records maintained by the college, including academic and financial records.

Parents of dependent students, as defined by the Internal Revenue Service, may have access to the college records of their dependent sons or daughters without student consent. Parents do not have the right to see records of children who are no longer dependent upon them.

At Broome Community College, the repository for student records is the Office of the Registrar (SS105). This office is open weekdays from 9 a.m. to 4:30 p.m. during the academic year.

In keeping with the spirit of Section 438 of the Act, the Registrar has been appointed as Records Access Officer. The following procedures have been developed for the benefit of the student and eligible parent:

1. a. A student in attendance at Broome Community College shall, upon request, be able to view his/her educational records at the Office of the Registrar within 45 days of the date of said request.
   b. A parent or guardian of a student in attendance at Broome Community College, who claims a student as a dependent on his/her Federal Income Tax Form shall, upon proper presentation of the dependency condition, be afforded the same rights as set forth in Paragraph 1a. Further, in cases of divorce, the school may give access to either parent (custodial or non-custodial) unless there is a court order, state statute, or other legally binding document prohibiting such.
2. Access to personally identifiable information about a student without the consent of the student may be provided by the College to the following individuals or agencies only:
   a. School Officials with a legitimate educational interest. A school official is defined as a person employed by the college in an administrative, supervisory, academic or support staff position (including law enforcement unit and health staff); a person or company with whom the college has contracted (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees; or assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility.
   b. School officials of educational institutions to which a student might transfer.
   c. Authorized state and federal government officials of educational and funding agencies.
   d. Educational research agencies, with the provision that they release only non-personally identifiable data.
   e. Accrediting organizations.
   f. The U.S. Department of Defense under the Solomon Amendment.
3. Disclosure Without Approval of Student or Eligible Parent:
   a. Upon receipt of a Judicial Subpoena of the records of a student, a reasonable attempt will be made to notify the student or the parent of the existence of the order of the subpoena in advance compliance therewith unless subpoena states otherwise.
   b. In the event of an emergency involving the health or safety of a student, the Registrar may disclose information to Federal or State Officials.
   c. Directory Information — The name of the student, full time or part time status, dates of attendance, BCC e-mail address, honors, and degree earned and date of graduation will constitute the total amount of information given to any individual making inquiry at Broome Community College, *unless the student or eligible parent refuses to permit the disclosure. The student or eligible parent must notify the Registrar within two weeks of the beginning of semester classes that such personally identifiable information is not to be designated as directory information with respect to that student.*
4. Broome Community College shall, on request, provide an opportunity for a hearing in order to challenge the content of a student's education records to insure that information in the education records of the student are not inaccurate, misleading, or otherwise in violation of the rights of privacy or other rights of students. The request for a hearing will be directed to the Registrar.

# Table of Contents

**Preface** ..... 5-8

**PART 1** ..... 9-40

***Policies, Procedures, and Services***

Admissions, expenses, financial aid, academic policies, student services, and student life

**PART 2** ..... 41-104

***Academic Programs***

Outlines of course and credit requirements for each of the various academic majors offered by the College, as well as the type of certificate or degree that can be earned by completing the requirements of each major. Curricula are arranged alphabetically, and introduced by interest area opposite page 41.

**PART 3** ..... 105-154

***Course Descriptions***

Descriptions of all courses offered by the College, arranged in alphabetical order by curriculum codes, and subheaded by academic subject. Check the listing of curriculum codes opposite page 105 to find the subject area which interests you.

**PART 4** ..... 155-169

***College Organization***

Administrators and faculty currently on staff at BCC, listed by department. Information on the State University of New York (of which BCC is a part), Index, and Academic Calendar. Map of campus is on inside back cover.

# About Broome Community College

Broome Community College is a comprehensive community college supervised by the State University of New York, sponsored by the County of Broome, and governed by a Board of Trustees.

It offers programs designed to prepare graduates for immediate employment (Associate in Applied Science degrees), and for transfer to four-year colleges and universities (Associate in Arts, and Associate in Science degrees). The college also sponsors a variety of certificate programs, short-term training programs, and non-credit community education courses.

## Vision, Mission, and Values

### Vision

Broome Community College strives to be a leader in anticipating and responding to diverse individual, community and global needs for accessible lifelong educational opportunities. We collaborate with others to create high quality, innovative, student-centered learning environments guided by our shared values.

*Broome Community College...*

| | |
|---|---|
| *strives to be a leader* | We see our role as one of leadership in the community. |
| *in anticipating* | We will be proactive in identifying future needs for educational, training and student support services. |
| *and responding* | We will marshal our resources and take responsibility for making things happen so that needs are addressed in a focused and timely manner. |
| *to diverse individual, community and global needs* | The programs and services developed by us may be delivered to an individual, but they will take into account economic and social needs of the local community as well as selected global concerns. Our challenge is to contribute tangibly to the improvement of the local community by using our intimate knowledge of the community and our skills and resources to build, student by student, an effective citizenry and productive workforce. |
| *for accessible* | We have a unique mission to maintain the highest degree of accessibility by keeping costs low, and providing services in convenient locations and at appropriate times. This could include designing programs that are integrated into employment or secondary educational settings. |
| *lifelong learning opportunities* | The community relies on us to adapt our programs to meet residents' changing needs. Responding to major job dislocations and an influx of refugees, reinforcing the skills of the employed workforce, enriching the lives of residents with new ideas, helping people get back on track with a second or third chance at an education, are all vital roles played by BCC. |
| *We collaborate with others to create* | We are committed to addressing the important issues facing the local community, but we know that the answers will come from the combined efforts and resources of many agencies, organizations, and institutions. |
| *high quality* | We are recognized for the quality of our programs and the range of services they include. This quality will be maintained and improved. |
| *innovative* | Our solutions may require new partnerships, new ways of delivering educational services, and new ways of using our educational skills and resources. We will contribute the creativity of our people in whatever ways will be productive. |
| *student-centered learning environments* | We recognize that the need to supply each student with appropriate and diverse learning opportunities, as well as administrative and support services, is more important than ever to the achievement of our mission. |
| *guided by our shared values* | We will maintain our commitment to the principle of free and open inquiry in the academic tradition. The Statement of Values is the framework that guides the policies and procedures governing the day to day operations of the college. |

### Mission

Broome Community College provides:

- open access to those who can benefit from its programs and services.
- university parallel degree programs for students aspiring to baccalaureate degrees and professions.
- occupational and technical degree and certificate programs for students aspiring to careers in business, health, technology, and human services.
- General Education to broaden and deepen students' intellectual, moral, civic, and social competence for effective participation in the world community.
- collaborative leadership among the diverse institutions, organizations, agencies, and other entities which comprise our community.

- community and continuing education and training to serve the needs and interests of individuals, employers, and agencies.
- career advising, skills and knowledge assessment, and related support services to help students reach their full potential.
- a community of free inquiry and educational achievement wherein each member is treated respectfully.
- a broad range of educational, social, athletic and recreational activities to foster students' personal development, community involvement, and leadership skills.

### Values

In fulfilling its mission and fashioning its goals, Broome Community College affirms these commitments:

- *to Learning* — The primary reason BCC exists is to offer lifelong learning opportunities for our students under the principle of free and open inquiry. These opportunities are accessible, affordable, and of the highest quality possible.
- *to Excellence* — In fulfilling our mission, achieving excellence is a process both valued and expected. We value both the leadership of individuals and collaboration of teams as part of a continuous improvement effort.
- *to Equity* — Respecting both individual rights and social obligations, the college is an advocate for fairness and just treatment for all students and staff.
- *to Diversity* — BCC values and celebrates the diversity of its students and employees. We respect their diverse life experiences, appreciate their contributions to our learning community, and promote individual development and success.
- *to Accountability* — We honor the trust placed in us by the larger community and understand our accountability for efficient and effective use of resources. We also expect personal honesty, integrity, and responsibility to be essential elements in our learning environment.
- *to Innovation* — BCC encourages all members of its community to imagine. We nurture an environment of innovation and experimentation and invite all to participate in the unique possibilities of a learning community.

## College History

1946 Chartered as New York State Institute of Applied Arts and Sciences at Binghamton

1953 Name changed to Broome County Technical Institute

1956 Name changed to Broome Technical Community College

1957 Campus moved to present location on Upper Front Street, Binghamton, NY

1971 Name changed to Broome Community College

## Campus Setting

Binghamton is centrally located in the State of New York, 45 miles from Ithaca, 70 miles from Syracuse, and about 200 miles from both New York City and Philadelphia. Routes I-81, I-88, and NY 17/I-86 pass through the city.

Binghamton, Endicott, and Johnson City make up the Triple Cities, an urban metropolitan area that offers a sophisticated cultural life along with easily accessible outdoor recreational opportunities. Major employers are United Health Services, Endicott Interconnect Technologies, Lourdes Hospital, IBM, Maines Paper and Food Service, Lockheed Martin, and Binghamton University (one of SUNY's four University Centers, located a few miles from BCC).

Broome Community College's campus is located three miles north of Binghamton on Upper Front Street, which is Route 11 alongside Interstate 81. The campus is landscaped with a variety of trees and open green spaces and has a hillside backdrop; four of its 15 buildings face a major quadrangle. The total campus building space is 600,000 square feet. A campus map is on the inside back cover.

## Computing Resources

BCC students are eligible for computer accounts providing access to current software suites, email, and the Internet, including the World Wide Web, in over twenty labs on campus. Personal computers, terminals, and laser printers are available for use throughout the day. Campus-wide networking gives access to over 500 devices. Dial-up lines make remote access possible. Visit our web site at: **http://www.sunybroome.edu**.

## BCC Foundation

The Broome Community College Foundation, Inc. is a self-supporting not-for-profit corporation established in 1965 by BCC Trustees and community leaders to raise, invest, and administer private funds to benefit BCC, its students and faculty. The Foundation's top priority is to assist students with grants-in-aid and scholarships, but its charter also calls for assisting faculty and staff by helping fund their professional development and training, and providing the College with equipment, seed money for special projects, and other items for which county funds are either insufficient or unavailable. The Foundation has also embarked on special capital projects such as campaigns to raise money to build and equip a new center for the College's health science programs. The Foundation serves as a conduit for all private gifts to the College. All such gifts are tax-deductible.

*FOUNDATION, continued on pg. 8*

*FOUNDATION, continued from pg. 7*

Over 100 community volunteers assist with the Foundation's fundraising program every year. In addition to annual gifts contributed by alumni, business and industry, community friends, organizations and foundations, the Foundation has endowment and trust funds of approximately $10 million which help support its programs and activities.

### Alumni

The College's Alumni Affairs program provides the link to over 30,000 alumni world-wide. News of the College and from alumni is disseminated in the *BCC News*, a semi-annual free publication available to all alumni whose current addresses are on file with the Alumni Affairs department. Membership in the Alumni Association is open to any BCC graduate by payment of a one-time $25 fee.

For information about Alumni Affairs or the Foundation, call 607 778-5477 or 607 778-5182.

## The Center for Community Education

Broome Community College has an extensive non-credit community education program which features courses, seminars, mandated professional training, and special events open and available to the public. In addition, BCC Community Education provides customized training and on-site credit courses for business and industry. The ExCEL program provides one-on-one support as well as workshops and training for the small business community. For a current catalog of community offerings, call (607) 778-5012, or visit the BCC Website at www.sunybroome.edu

The BCC Corporate Service Program demonstrates the College's commitment to local economic development. The mission is to produce quality non-credit and credit education and training programs for area business and industry.

For additional information on contract education and training programs, call Corporate Services at the BCC Center for Community Education, 607 778-5054.



# Policies, Procedures, & Services

# PART I

Admissions Information..... 9-13
Expenses (Tuition and Fees).....14-15
Financial Aid.....16-19
Academic Information.....20-31
Student Services .....32-36
Student Life .....37-40

# Admissions Information

## Admissions Procedures

Students are selected as they apply, complete the admissions process, and are found suitably qualified for a particular program. The following items are required by the Admissions Office before a decision can be made on a student's application.

1. Completed Application for Admission form.
2. Official High School transcripts and those college transcripts required by the College. Applicants must arrange to have transcripts mailed from the high school/college attended directly to the BCC Admissions Office.
3. If applicable, official G.E.D. scores sent for those applicants having a high school equivalency.

Here are a few items to note concerning the application process:

- Students who wish to enroll full or part-time in any curriculum must apply through the Admissions Office.
- American College Testing (ACT) or Scholastic Aptitude Test (SAT) score reports are not required, but if either or both are available, they should be forwarded to the Admissions Office.
- Recommendations from high school personnel are helpful, if available.
- An interview with an Admissions Counselor at Broome Community College is desirable.
- The postmark date of an application and the date an application folder is complete are important parts of the admissions process and help the College implement its first-come, first-served equal opportunity policy.
- Most programs require that prerequisite courses be successfully completed by June 30 of the summer preceding fall enrollment.

Applicants should recognize that it is their responsibility, not a counselor's or admissions officer's, to complete the necessary forms for admission and to see that all required transcripts and/or other information are received and recognized by the Admissions Office. Completing the application process is the first step toward matriculation, which also includes being accepted into a curriculum and enrolling in coursework.

Acceptance into Broome Community College applies only to the particular semester designated in the acceptance letter. If the person who is accepted does not attend BCC in the semester for which he or she was accepted, and wishes to enroll in a future semester, he/she must reapply. Records are kept on file for one year, so the reapplication process usually involves filling out another application form, unless additional college coursework has been completed.

International students and BCC Study Abroad Programs have separate admissions criteria (see pages 10, 29).

For more information and answers to questions contact:

Admissions Office
Broome Community College
P.O. Box 1017, Binghamton, N.Y. 13902
Phone: 607 778-5001
E-mail: admissions@sunybroome.edu

The Admissions Office administers placement tests in reading, writing, and mathematics to entering students.

The information gained from these tests is used along with other records to help place students in appropriate courses. Every effort is made to place students in courses in which they can succeed. In some cases, students will be required to enroll in non-credit developmental courses.

### Early Admissions

Early Admissions is a program for high achieving high school students who can benefit from taking college courses, full or part-time, before graduating from high school. While high school seniors are usually enrolled in this program, qualified juniors may also be eligible.

Anyone interested in part-time Early Admissions should contact the BCC Admissions Office at 607 778-5001 or his/her high school counselor for the special application form. Full-time applicants should use the regular student application.

### Applicants Without A High School Diploma

Students who lack a high school or a general equivalency diploma (GED) may apply for admission if their high school class has already graduated or they are at least 19 years of age. These students must take and meet the institution's standards on an Ability to Benefit test approved by the Department of Education.

Applicants who are admitted through this method may apply to New York State for an equivalency diploma after completion of 24 hours of college credits in these subject areas:

- Six (6) credits in English language arts including writing, speaking and reading (literature)
- Six (6) credits in mathematics
- Three (3) credits in natural science
- Three (3) credits in social science
- Three (3) credits in humanities
- Three (3) credits in career and technical education and/or foreign languages

Students admitted under the provisions of an "Ability to Benefit" must earn a GED prior to receiving a certificate or degree from the College.

### Applicants With An IEP Diploma

The New York State Education Department has ruled that an IEP diploma is different from a high school diploma in that it is not an indication of successful completion of high school study. Therefore, students who hold an IEP diploma may apply for admission to BCC and will be evaluated on the same criteria used for students who lack a high school diploma or GED.

### Home-Schooled Applicants

Home-schooled students will be eligible for admission to BCC if they can provide either 1) a letter from the superintendent of the school district in which the student resides, attesting to the student's completion of a program of home instruction meeting the requirements of Section 100.10 of the Regulations of the Commissioner of Education, or 2) a passing score on the general comprehensive examination for the state high school equivalency diploma (GED) (and the diploma itself when available).

### Readmission

Matriculated students who have withdrawn from the College, have not been in attendance for one semester or longer, or have graduated from BCC, must apply for readmission to return as a matriculated student. They do not need to submit high school records again unless they have been separated from BCC for six or more years.

### Admission of Ex-Offenders

Applicants to BCC who have been convicted of a felony must participate in an admissions review process. Failure to disclose a felony conviction on the Admissions Application Form may result in expulsion from the College. For more information, contact the Admissions Office.

### Services and Training Resources for Individuals in Vocational Education Program (STRIVE)

The BCC STRIVE Program is a student support program that provides services to a specific population, mostly individuals with low income and dependant children, who want to attend BCC for occupational education.

The program helps individuals cope with the everyday tasks of their personal lives and with the responsibilities of being a student. STRIVE works in collaboration with the Self-Sufficiency Center, a community organization that helps to coordinate childcare and transportation needs of the students. Those interested in the program may contact the BCC STRIVE Program, Room 209, Student Services Building, telephone 607 778-5350.

## MMR Immunization Regulations

It is the intent of the administration of Broome Community College to comply and enforce the provisions of Public Health Law Article 21, Title IV, Section 2165-Immunization.

All students registering for 6 or more credits and attending New York State colleges and universities are required to show proof of immunity against measles, mumps, and rubella, prior to attending classes. Individuals born before January 1, 1957, are exempt from this requirement.

Proof of immunity to measles means *two doses of measles vaccine* on or after one's first birthday and at least 30 days apart, physician documented history of disease, or serological evidence of immunity. Proof of rubella immunity means one dose of rubella vaccine on or after the first birthday, or serologic evidence of immunity. Proof of mumps immunity means one dose of mumps vaccine on or after one's first birthday, a physician documented history of disease, or serologic evidence of immunity.

*NOTE: If you have graduated from a high school in the United States* after *June 1980, your diploma or high school transcript is acceptable proof of having had one MMR. YOU MUST STILL PROVIDE PROOF OF THE SECOND MEASLES BOOSTER.*

## International Students

**General Information**

Broome Community College welcomes students from other countries. The College is authorized by the U.S. Justice Department to issue the necessary Certificate of Eligibility for Nonimmigrant F-1 Student Status (Form I-20) to international students planning to enter the U.S. and attend BCC on an F-1 Student Visa.

*For additional information and for the necessary forms to apply to Broome Community College as an international student, contact the Admissions Office, 607 778-5001; FAX 607 778-5310; e-mail: admissions@sunybroome.edu*

**International Admission Requirements**

International student applicants should submit the following to the Admissions Office:

1. "Application for Admission" and "International Applicant Information" forms. Both of these forms can be obtained by writing to the Admissions Office.
2. Official or certified copies of all secondary and post-secondary academic records (transcripts). Records should include the grades/marks of all subjects completed and the results of any external examinations. Records should also indicate any diplomas, degrees or certificates earned. If records are not in English, a certified, *literal* translation should be sent *with* the official document.

**Other International Admission Requirements, as applicable:**

3. English Language Proficiency — for any international applicant whose native language is not English, an acceptable English language proficiency must be demonstrated.

   This requirement can be met by 1) submitting official TOEFL scores of 400 or better *or* 2) submitting official academic records which show the successful completion of four years of English language study at the secondary or higher level school.

   International applicants who submit TOEFL scores of 525 or better will be admitted to the programs of their choice if they have appropriate academic backgrounds. Academic program requirements are listed in the College Catalog. Any applicant who scores below 525 or has not taken the TOEFL can be admitted to the College and will be assigned a special academic advisor for assistance with course registration.

   International applicants whose native languages are not English must take a special language proficiency exam at the College before registering for classes. Based on exam results, an international student may be required to enroll in English As A Second Language coursework each semester until an appropriate proficiency level is met. Along with other students at the College, international students are also required to take a mathematics placement test.
4. Financial Sponsorship — international applicants planning to attend BCC on an *F-1 Student Visa* must demonstrate that they have the financial means to cover their educational and living expenses while attending the College. A BCC "Declaration of Financial Support" form (Affidavit of Support) should be completed and returned with appropriate financial documentation. Upon acceptance to the College, a Certificate of Eligibility for Nonimmigrant F-1 Student Status (Form I-20) will be sent to the applicant. (An "I-20" is a required document to apply for an F-1 Student Visa). International students currently attending a school in the U.S. on an F-1 status and planning to transfer to BCC, must obtain a new I-20 from the College.

**Other International Requirements:**

Upon enrollment at the College, international students must show evidence of health insurance coverage. International student health plans are available through the College's Student Health Services Office.

**Other General Information:**

International students who do not meet the English Language proficiency requirements above can be admitted to the College only by special arrangement, and must be in "sponsored" groups of 10 or more students.

The College provides an advisor, through the ACCESS Center, to assist international students in all areas of student life while attending BCC. The advisor will also assist international students in finding housing, since the College does not have on-campus residence halls. The College estimates the cost (tuition, fees and books) and living expenses for one academic year (two semesters) for a full-time student at approximately $12,100.

International students who are seeking transfer credit to BCC, earned from an educational institution outside the USA, are required to submit an official evaluation of foreign educational credentials from an accredited agency. Information on approved agencies is available from the Admissions Office.

## Academic Standards for Clinical Education

Academic Standards for Clinical Education in the Health Sciences programs require dismissal of students who fail to meet established academic objectives for the physical safety, psychological safety, and confidentiality of patients.

Students interested in Health Science curricula are advised to see the appropriate department chairperson. Annual physical examination, including Mantoux and other testing, is required in most curricula.

**OSHA STANDARDS**

Although not required by either Broome Community College or the State University of New York, students enrolled in health science programs, where clinical experience or on-campus Dental Clinic is a curriculum requirement, should note that compliance with the OSHA Bloodborne Pathogen Standards is mandated.

The OSHA standards on Exposure to Bloodborne Pathogens require employees to either be vaccinated for hepatitis or to sign the appropriate form declining the vaccination. The standards do not mention students. Nonetheless, many affiliate health agencies are requiring students to comply with the regulations, and hepatitis vaccinations are strongly recommended by most Health Science curricula.

## Full Opportunity Program

Broome Community College has a Full Opportunity Program, which is designed to give every individual a chance to fulfill his/her own personal goals and potential.

This means that all Broome County applicants who have graduated from high school within the prior year, or applicants who have been released from active duty with the Armed Forces of the United States within the prior year, are given priority for admission until March 1 and are guaranteed admission to the College, but not necessarily assured of space in the programs of their choice. To be admitted into any programs of study, all applicants must meet the academic requirements of those programs. When students do not have the required academic background for a particular curriculum, they will be accepted into a program or selection of courses for which they are qualified, if space is available. Some students may require more than two years to complete a program of study.

Broome Community College does not discriminate on the basis of race, sex, color, religion, age, national origin, disability, marital status, sexual orientation, or status as a disabled veteran or veteran of the Vietnam era in the recruitment or education of students; the recruitment and employment of faculty and staff; or the operation of any of its programs or activities. Where relevant, state and federal laws apply.

## Credit Evaluation

### Transfer and Articulated Credit

College level course credits earned at regionally accredited* post-secondary institutions can be transferred to Broome Community College. Credits earned at non-regionally accredited institutions with which Broome Community College has a current articulation agreement may also be transferred to BCC. Transfer credit is subject to the approval of the Department Chairperson or Dean's designee and with the following provisions:

Broome Community College must receive official transcripts of all college level work completed at other regionally accredited colleges before formal transfer credit will be awarded.

Grades earned at other institutions will not be entered into the cumulative grade-point average (GPA) at Broome Community College.

Grades of "C" or higher are transferable if coursework is relevant to the student's program of study at Broome Community College. "C-" and "D" grades may be transferable with the approval of the Department Chairperson or Dean's designee.

### Advanced Placement Examination (AP)

The College will recognize for credit the AP examinations of the College Entrance Examination Board. A score of three or above is generally acceptable for credit, but each academic department establishes its policy. Laboratory courses may require additional lab work for full credit for a college course. Credit awarded will be handled as a transfer credit.

### College Proficiency Exams (CP)

The CP exams of the University of the State of New York will be recognized for credit upon approval by the appropriate department. Credit awarded will be handled as transfer credit.

*Accrediting agencies – Middle States, New England, North Central, North West, Southern Association, and Western.

## Requirements and/or Recommendations – Academic Preparation for Admissions

| Curricula | Requirement | Recommendation |
|---|---|---|
| Accounting<br>Business<br>(General Emphasis)<br>Office Administration<br>Financial Services<br>Hotel/Restaurant Management<br>Marketing<br>Paralegal | | Mathematics Level 1 |
| Computer Technology (Network and WEB tracks)[1,2] | | Mathematics Level 2 |
| Business Information Management<br>Entrepreneurship | | Mathematics Level 1 |
| Business Administration<br>Business Administration<br>International Business Emphasis<br>Management | | Mathematics Level 3 |
| Chemical Dependency Counseling<br>Communication and Media Arts<br>Criminal Justice - Corrections<br>Criminal Justice - Police<br>Early Childhood<br>Fire Protection Technology<br>General Studies:*<br>Art/Design, Music,<br>Acting/Theater,<br>Elementary Education<br>Human Services<br>Individual Studies<br>Liberal Arts* | | Mathematics Level 4<br><br>4 units English<br><br><br>3 units Science<br>3 units Foreign Language<br>4 units Social Studies<br><br>* University parallel transfer programs. Liberal Arts, Science Option applicants should have four years of MATH and four years of science. |
| Civil Engineering Technology[1]<br>Computer Information Systems[1,2]<br>Computer Technology (Technical Track)[1,2]<br>Mechanical Engineering Technology<br>Telecommunications Technology[1] | | Mathematics Level 3<br>Regents Physics or A.S. III, IV |
| Electrical Engineering Technology[1]<br>Electrical Technology (proposed program) | | Mathematics Level 3<br>Regents Physics or A.S.[4] III, IV |
| Computer Science[1,2] | | Mathematics Level 4<br>Advanced Algebra or Pre-Calculus<br>Regents Physics, Regents Chemistry or A.S. I, II, III, IV |
| Engineering Science[1] | | Mathematics Level 4<br>Regents Chemistry, Regents Biology, Regents Physics OR A.S. I, II, III, IV |
| Dental Hygiene[1,2,3] | Mathematics Level 1<br>Chemistry, Regents Biology OR A.S. I, II<br>(minimum grade 74 in Chemistry) | |
| Health Information Technology[1,2,3] | Mathematics Level 1<br>Regents Biology[5] OR A.S. I, II | |
| Medical Assistant[1,2,3] | Mathematics Level 1<br>Regents Biology[5] OR A.S. I, II | |
| Medical Laboratory Technology[1,2,3] | Mathematics Level 3<br>Regents Biology[5], Regents Chemistry[5] OR A.S. I, II, III, IV<br>(minimum grade 74 for all science courses) | |
| Nursing[1,2,3] | Mathematics Level 2<br>Regents Biology[5], Regents Chemistry[5] OR A.S. I, II, III, IV<br>(minimum grade 74 in all science courses) | |
| Physical Therapist Assistant[1,2,3] | Mathematics Level 2<br>Regents Biology[5], Chemistry[5] OR A.S. I, II<br>(minimum grade 74 in all science courses) | |
| Phlebotomy | | Mathematics Level 1,<br>Regents Biology OR A.S. I, II |
| EMT Paramedic | Mathematics Level 1 | Regents Biology, Regents Chemistry OR A.S. I, II |
| Radiology Technology[1,2,3] | Mathematics Level 2<br>Regents Biology[5], Regents Physics OR A.S. I, II, III, IV<br>(minimum grade 74 in all science courses) | |

**NOTE:** See Mathematics Equivalencies For Use In Admissions Decisions on page 13.

**ALL GRADES ARE FINAL CLASS AVERAGES, NOT REGENTS EXAM GRADES**

[1]BCC has a developmental program that enables students lacking the proper academic preparation for professional level courses to enroll in appropriate credit or non-credit courses that will qualify them. They can take these courses at BCC or elsewhere preceding their admission. The College reserves the right, however, to consider for enrollment in professional courses only those applicants who have completed all prerequisites by June 30. Applicants who elect to take these courses during the spring and fall semesters would need more than two years to complete the curriculum.

[2]In these programs, BCC gives priority for admissions to Broome County residents who will graduate from high school this academic year, or are service veterans. Students interested in a degree in the Health Science or Computer Studies curriculums who enter the College in another program are cautioned that there is no guarantee that a petition to transfer will be approved. They should discuss the possibilities with the appropriate department chairperson.

[3]If prerequisite courses are taken at BCC, a grade of 2.0 or better is required.

[4]AM is Applied Math and AS is Applied Science as defined by Tech Prep. P.T. is Principles of Technology. ABC is Applied Biology & Chemistry.

[5]Equivalent course substitutions may be determined by the department chair/dean.

## Mathematics Equivalencies For Use In Admissions Decisions

| Level of Mathematics Proficiency | Former Regents Course Requirement | Current Math A/B Equivalent | Applied Math Equivalent | Non-NYS High School Course Equivalent |
|---|---|---|---|---|
| Level 1 | Regents Course I | Math A with a minimum exam grade of 65 | Applied Math I and II | Algebra I |
| Level 2 | Regents Course I and II | Math A with minimum exam grade of 85 | Applied Math I, II and III | Algebra I and Geometry |
| Level 3 | Regents Course I, II, and III | Math B with a minimum exam grade of 65 | Applied Math I through IV | Algebra I, Geometry, and Algebra II with Trigonometry |
| Level 4 | Regents Course I, II, and III plus Math 12 | Math B with a minimum exam grade of 85 | N/A | Algebra I, Geometry, and Algebra II with Trigonometry plus Advanced Algebra or Pre-Calculus |

# Expenses

**[1]The BCC Board of Trustees establishes tuition and fee amounts for each semester. The amounts on pages 14 and 15 were established for the 2002-03 year only. Semesters beyond that point are subject to increase.**

**[2]The College establishes tuition and fee refund policies and procedures each year in accordance with Federal and State mandated regulations. The policies and procedures in this section were established for the year 2002-03. Years beyond that point are subject to changing Federal and State guidelines, thus future college refund policies and procedures are subject to change. The regulations for any particular year are available at Registrar, Financial Aid, and Student Accounts Offices.**

## Tuition

Tuition and fees are payable at the Student Accounts Office according to a payment schedule released by the College each semester. The responsibility for payment rests upon the student. Both full-time and part-time students who have registered for courses will be "de-registered" if they fail to meet established due dates for tuition/fee payment.

*Students who are administratively dropped for non-attendance during the semester continue to have a tuition and fee obligation.*

### Students Carrying 12 or more Credit or Credit-Equivalent Hours

(considered full-time students)

**For New York State residents**

- with residency certificate: **$1,250** per semester[1]
- without residency certificate: **$2,500** per semester[1]

**For out-of-state residents**

- **$2,500** per semester[1]

**Tuition Deposit Policy**

Students admitted to the College prior to August 1 will be requested to submit a $50 tuition deposit. This payment will be applied toward the Fall semester tuition bill for those students who register. Students who do not register for the Fall semester can obtain a refund of the tuition deposit, through the end of the first week of classes, by submitting a request in writing to the College Controller. At the end of the first week of classes, the tuition deposit is non-refundable.

### Students Carrying Fewer than 12 Credit or Credit-Equivalent Hours

(considered part-time students)

**For New York State residents**

- with residency certificate $105 per credit[1]
- without residency certificate $210 per credit[1]

**For out-of-state residents**

- $210 per credit hour[1]

*NOTE* — See "credit equivalent" on page 26 for more information.

Many students may qualify for financial aid, some of which is applicable toward tuition. *See Financial Aid section on pages 16 through 19.*

SEE TUITION REFUND POLICY ON PAGE 15.

## Residency Certificate

*The completed residency forms are required once each academic year.*

*Failure to comply with this requirement within 30 days of registration will result in assessment of non-resident tuition charges.*

To qualify for the resident tuition fee, a student is required by law to present *once each academic year,* on or before registration, a residency certificate indicating that he or she has been a legal resident of the State of New York for one year, and of a county for six months.

### For Dependent Students

A student who is a dependent of a person who lives **outside** of New York State is considered a resident of that other state for educational purposes, regardless of where the student actually resides.

### Broome County Residents

Registered full-time students will be mailed a copy of the application for residency certificate. This application must be completed and presented at the time of tuition payment.

### Out-of-County Residents

Registered full-time students will be mailed a copy of the application for residency certificate. The application must be completed, notarized, and presented to the County Treasurer of the *county in which the student resides.* The County Treasurer will then issue a residency certificate to the student. This residency certificate must be presented at the time of tuition payment.

### International Students

International students will be considered New York State residents, for tuition purposes, one year after showing intent to make New York State their permanent domicile. (Example: Passport stamped, "Application for permanent residency status pending.") Certain visa types preclude the ability to show such intent.

### Refugees

Refugees who come to New York State immediately after leaving their "home" country will be given New York State Residency status immediately. Refugees who first reside in another state after leaving their "home" country will be required to fulfill a one year residency term before being considered a New York State resident for tuition purposes.

### Part-Time Students

Part-time students must meet the same requirements as stated above.

## College Fees[1] (mandatory)

***College fees are non-refundable.***

Matriculation fee (one-time fee) .....$45[1]

Service fee (Non-Matriculated) (per semester) .....$ 6[1]

Laboratory fees.....$12 or $18 per lab[1]
(Depending on cost intensive nature of the lab)
....Music.....up to $300 per lab[1]

Technology fee (per semester)
full-time, fall/spring.....$35[1]
part-time, fall/spring.....$25[1]
full time/part-time, summer .....$25[1]

Vehicle Registration fee .....$25[1]
Summer only .....$ 5[1]

Late Registration fee.....$10[1]
(begins on first day of semester)

Credit by Examination
Non-Laboratory Course .....$50[1]
plus $15 per credit hour
Laboratory Course .....$50[1]
plus $15 per credit hour
plus $10 for each clock hour of lab examination (maximum $165)[1]

Credit by Evaluation (Portfolio Assessment).....$75[1]
plus $15 per credit hour[1]

Health Science Clinical Makeup fee.....$50[1]

Rush Transcript fee.....$ 5[1]

Fax fee .....$ 5[1]
(up to 5 pages – $1 per page thereafter)

Duplicate Record fee.....$1[1] per copy

Mailing fee.....$3.85[1] per folder

Returned Check fee.....$20[1]

Courses requiring outside services, such as PED 170 Trail Riding, Music Lessons, etc., may require students to pay additional out of pocket expenses directly to those service providers.

## Student Fees (mandatory)

***Student Fees are non-refundable.***

### Student Activity Fee

Full-Time Student .....$65 per semester[1]
Part-Time Student .....$5 per credit hour[1]
I.D. Card Replacement fee .....$10 per card[1]

The activity fee entitles all students to admission to varsity games, convocations, dances and parties, as well as a subscription to the student newspaper and the opportunity to participate in a varied program of co-curricular activities, including intramural athletics.

The Student Activity Fee funds the following types of programs on campus: the Student Handbook and Planner, Orientation, 35 clubs and organizations, 12 athletic teams, intramural sports, travel, noontime programs, family events, films, picnics and more.

### Accident Insurance, Student Health Service Fee

Full-Time Student (mandatory)
Accident Insurance.....$14 per year[1]
First time full-time in spring.....$9[1]

Health Service Fee (mandatory)
Full-Time Students.....$7 per semester[1]
Part-Time Students.....$4 per semester[1]

Money collected from the Health Service fee is used for physician services, drugs, supplies, educational material, diagnostic equipment, special health programs and related Health Service expenses. The fee is non-refundable if the student withdraws from the College.

The accident policy covers the student for 12 months commencing the first day of classes for expenses incurred as a result of an accident, on or off campus. Maximum coverage is $2,500 per accident. Claim forms are available in the Student Health Services. Claims must be filed with Student Health Services before expenses will be paid. Part-time students may also enroll in the accident insurance program. The fees and coverage are the same. Contact Student Health Services for more information. *Students who withdraw and wish a refund of their accident policy must apply directly to the insurance company.*

### International Student Health Insurance

International students must show that they have health insurance coverage before they enroll at the College. Health Insurance is available through the College at the following rates (which may be subject to change): Fall semester - $325[1], Spring semester - $260[1], and Summer - $195[1]. Claim forms are available in the Student Health Services office during the year. Students who withdraw and wish a refund of their health insurance fee must apply directly to the insurance company. *Note that the "Health Insurance" mentioned in this paragraph is different from the "Health Service Fee," which is not an insurance.*

### Medical Insurance

The College does not provide medical insurance. Information about such insurance is available through Student Health Services and directly from insurance companies.

## Books, Supplies, Uniforms and Other Expenses

Students are expected to purchase textbooks and related instructional materials for the courses in which they are enrolled. These may be purchased at the Bookstore located in the Campus Services Building. The average cost of textbooks and required supplies varies depending on curriculum and ranges between $200 and $700 per semester.

In the Health Science curriculums students will provide, at their own expense, their own transportation to off-campus locations for necessary clinical and other experience. Students are also required to have a physical examination which may cost as much as $100.

In addition, some curriculums require uniforms. Among these are Hotel/Restaurant, Nursing, Radiologic Technology, Medical Laboratory Technology, Medical Assistant and Physical Therapist Assistant. Gym clothes are necessary for physical education classes. Dental instruments and pants-type uniforms are prescribed for Dental Hygiene students.

A Windows-Multi-Media Pentium home computer is strongly recommended for Engineering Science and Computer Studies students.

The following estimated expenses are in addition to the usual cost of text books.

| | Freshman | Senior |
|---|---|---|
| Business Technologies | $ 50 | 75 |
| Civil Technology | 60 | $90 |
| Dental Hygiene | 1,000 | 500 |
| Electrical Technology | 300 | 300 |
| EMT Paramedic | 100 | 100 |
| Engineering Science | 325 | 750 |
| Mechanical Technology | 90 | 90 |
| Medical Assistant | 60 | 235 |
| Medical Lab Technology | 50 | 150 |
| Health Information Technology | 105 | 75 |
| Nursing | 100 | 400 |
| Radiologic Technology | 400 | 275 |
| Telecommunications Technology | 300 | 300 |

## Refund Policies, Procedures

### Tuition Refund Policy[2]

**Effective FALL 1998, New York State has mandated the current refund policy for all SUNY community colleges.**

#### Fall and Spring Semesters

Students who *officially withdraw* from classes during the first three weeks of a *semester* will be entitled to tuition refunds on the following basis - 100% refund before the first day of the semester; 75% on or before day 5 of the semester; 50% on or before day 10 of the semester; and, 25% on or before day 15 of the semester. After day 15 of the semester there is no refund.

"Day of semester" does not refer to specific class meetings. It refers to actual day of the campus wide semester.

TITLE IV FINANCIAL AID RECIPIENTS PLEASE SEE TITLE IV FINANCIAL AID REFUND POLICY ON THIS PAGE.

*Students dropping any course less than 15 weeks in length will receive 75% refund only during the first week of the course. After that, there will be no refund.*

#### College On The Weekend

Refunded at 100% up to 5 p.m. on first Friday of Weekender classes; 75% refund through the Friday following the first weekend of classes (0% refund thereafter).

#### Summer Session

Students who withdraw from Summer Session classes will be entitled to only a 25% refund during the first week of the term. After that, there will be no refunds.

### Refund Procedure[2]

An application for refund of tuition and fees must be made in writing in the Registrar's Office (SS 105). The application must be on the College form provided. The date on which the application is filed is considered the official date of the student's withdrawal and any refund to which the student may be entitled is computed using that date.

### Title IV Financial Aid Refund Policy[2]

Students who receive Title IV financial assistance (Pell, SEOG, Perkins or Stafford Loans) are subject to the most recent guidelines mandated by the Higher Education Act Amendment. If—and only if—they officially withdraw or are administratively withdrawn from the institution, the unearned funds received for tuition, fees, and other educational expenses, must be returned to the Federal Title IV programs. This return may result in an outstanding balance due to Broome Community College and/or to the U.S. Department of Education. All other cases (e.g. partial withdrawals) will follow the N.Y.S. mandated refund policy for community colleges.

## Other Procedures[2]

Students who defer tuition on Financial Aid and who then become ineligible to receive that aid or any portion of it will be subject to an immediate obligation for payment and/or collection of tuition, fees and disbursements. The College reserves the right to use whatever collection procedures it deems appropriate to satisfy any outstanding debt. The total outstanding debt may include additional costs incurred due to collection activities. The cost will vary depending on the debt. Additional costs may be as much as 33⅓ percent of the debt plus attorney/court fees.

### Withholding Diplomas and Transcripts

A student's Official College Transcript and diploma will be withheld if there are outstanding financial or property-returning obligations. These could be to such College offices as Security, Learning Resource Center (Library), Student Accounts, Physical Education, as well as others. Students must settle any such outstanding debts to the College and then present evidence of the settlement to the Office of the Registrar.

# Financial Aid

## General Information

Considerable financial aid is available at Broome Community College, and the College maintains a Financial Aid Office to help students. Information and applications for financial aid are sent to students who are seeking enrollment when they apply for admission. Any student planning to take one class or more may qualify for financial aid by formally applying and being accepted into a degree or certificate program.

Financial aid at BCC falls into three broad categories — grants that do not have to be repaid, loans on which interest rates are usually low and that have to be repaid after graduation or leaving college, or part-time employment called "Work-Study." Assistance usually comes from a combination of these resources, commonly referred to as a "financial aid package."

## Student and Family Resources

"Financial Need" is a term used to describe the funds required by a student to pay for his/her college education in excess of the amount that he/she and parents can afford to pay. Financial need is determined by using a standardized formula, which defines the "initial" or "demonstrated" need. The formula:

**Cost of attendance** (including tuition, fees, books, room, board, transportation, etc.)
**— Family Contribution** (based on student's and parents' net assets, income, household size, number in college, etc.)
**= Financial Need**

The Financial Aid Office at Broome Community College operates on the premise that all parents and students have a responsibility to contribute as much as they can toward the cost of the student's education. This contribution plays the primary role in determining the actual initial need.

To qualify for financial aid, a student must be enrolled in a degree program of the College and be taking one or more classes, in addition to having initial or demonstrated need. This need can be met in a number of different ways—a combination of grants, loans and work-study funds in varying amounts. This combination is put together by the financial aid administrator and is called a "financial aid package."

Many students would be unable to attend college without financial aid. However, no matter when application for financial aid is made, disbursal of awarded money is not always made on an "as needed" basis. First-time students should have sufficient resources available for living and educational expenses for 12 weeks into a semester to confirm attendance, as per federal regulations. Similarly, returning students should have sufficient resources through eight weeks.

## Estimating Expenses[4]

Below is a chart showing the estimated average costs for the 2002-03 college year for student expenses. It covers a 9-month period — the length of the college year, September to May.

| | Living w/ Parent Dependents | Not Living w/Parent No dependents |
|---|---|---|
| Tuition[4] | $2,500 | $2,500 |
| Fees[1,4] | 255 | 255 |
| Books | 800 | 800 |
| Transportation | 1,095 | 1,095 |
| Personal Expenses | 750 | 750 |
| Rent | 750 | 3,537 |
| Food | 750 | 1,260 |
| Child Care[2] | NA | NA |
| **Total** | **6,900** | **10,197** |
| Non-NY State Resident:[3,4] | | |
| (Additional Tuition) | $2,500 | $2,500 |
| **Total** | **$9,400** | **$12,697** |

## Tuition Deferral Payment

All Financial Aid funds (with the exception of Work-Study, Stafford and Unsubsidized Stafford loans, PLUS loans, EOP, Pauline Parker, and miscellaneous financial aid funds) will be applied to the recipient's outstanding tuition and fees for the current semester. Those applicants without finalized financial aid packages may be able to defer tuition payment by making arrangements with the Financial Aid Office.

*Broome Community College does not defer SUMMER tuition based on a TAP award or on a student loan.*

## Rights and Responsibilities of Recipients

Student recipients of financial aid are the beneficiaries of money made available by a variety of agencies — federal, state, institutional, and/or private. The act of accepting a financial aid award signifies that the recipient knows about, understands, and is willing to comply with both the rights and the responsibilities involved with that award.

### It is the recipient's *RIGHT to know:*

1. What federal, state and institutional financial aid programs are available.
2. The deadlines for submitting application forms for each assistance program.
3. The cost of attending the college and the refund policy.
4. The criteria used by the college to determine academic eligibility.
5. What resources (such as parental contribution) are considered in the calculation of financial need and how much of that need, as determined by the college, has been or will be met, and how (loan, grant and/or work-study).

*RIGHTS AND RESPONSIBILITIES OF RECIPIENTS, continued on page 17.*

[1] Lab fees are $12 or $18 per lab (not included in the above estimates).

[2] A child care allowance is added to the student's budget only when documentation of these expenses is submitted to the Financial Aid Office.

[3] An out-of-state resident must pay additional non-resident tuition.

[4] The tuition and fees amounts had not been officially established when this catalog was being prepared. The amounts may be subject to increase.

**— ALL COSTS ARE SUBJECT TO CHANGE —**

*To be considered for financial aid, students must apply each academic year.*

*RIGHTS AND RESPONSIBILITIES OF RECIPIENTS, continued from pg. 16*

6. How much of the financial aid will have to be repaid, and what portion is a grant (gift-aid). If the aid is a loan, the recipient should know what the interest rate is, the total amount that must be repaid, the repayment procedures, the length of time allowed to repay the loan and when repayment is to begin.
7. How the college determines whether the student recipient is making satisfactory progress and what happens if not.

**It is the recipient's RESPONSIBILITY to:**

1. Know and understand fully the financial aid program and one's specific financial aid package before signing forms.
2. Make sure that all application forms are completed accurately and submitted, on time, to the right place.
3. Pay special attention to, and accurately complete, the application for student financial aid. Errors can result in long delays in the receipt of financial aid. Intentional misreporting of information on application forms for federal financial aid is a violation of law and is considered a criminal offense subject to penalties under the U.S. Criminal Code.
4. Return any and all additional documentation, verification, correction, and/or new information requested by either the Financial Aid Office or the agency to which the application is submitted.
5. Read and understand all forms that one signs and keep copies of them.
6. Accept responsibility for all agreements signed.
7. Notify the lender of changes in name, address, or school status, if one has a loan.
8. Perform the work that is agreed upon in accepting a Federal Work-Study award.
9. Know and comply with the deadlines for application and/or reapplication for aid.
10. Know and comply with the school's refund procedures.
11. Understand how class attendance and passing grades that result in good academic standing relate to the continuance of Financial Aid.

## How to Apply for Financial Aid

### Packaging Policy

At Broome Community College the equity concept of financial aid packaging is used. Eligible students are funded on a need basis and in first-come, first-served order.

The Federal Pell Grant and the New York State Tuition Assistance Program (TAP) represent the floor of the package followed by any employment, loans, and grants available.

This kind of financial aid packaging ensures that any student who wishes to attend a post-secondary institution will have the opportunity to obtain the needed funding.

An example of the equity concept:

1. Total Student Costs (Budget)
2. Subtract Resources:
   a. Parental Contribution
   b. Student Contribution
   c. Other Resources
   Initial Financial Need
3. Subtract:
   a. Tuition Assistance Program (TAP) Grant or Estimate
   b. Federal Pell Grant or Estimate

   **= Unmet Need for Campus-Based Aid**
4. Subtract:
   a. Educational Opportunity Program (EOP)
   b. Federal Perkins Loan, (Formerly NDSL)
   c. FWS
   d. FSEOG
   e. BCC-Grant in Aid

   **= Unmet Need**

Most students are able to satisfy their unmet need through the Federal Stafford Student Loan Program. The amount of unmet need may vary from year to year.

### Federal and State Grants

All financial aid applicants will be expected to apply for two major sources of financial aid: the Federal Pell Grant and New York State's Tuition Assistance Program (TAP). Out of state residents should contact their State Educational Agency or the Financial Aid Office for information on state grant assistance from their state of residence. Although the College provides information, applications, and assistance, these funds are not generated by the College and must be applied for directly by the student to the agency. Students may apply for the Pell and TAP grants with the Free Application for Federal Student Aid (FAFSA) and the New York State TAP application.

Part-time students who enroll for at least 3 but less than 12 credits may be eligible for New York State's Aid for Part-Time Study (APTS) program. Unlike TAP, students must apply directly to the College for determination of eligibility.

Applications and information regarding these and other programs are available at the Financial Aid Office (Student Services Building, Room 111, Phone 778-5028).

### Campus-Based Financial Aid

For a student to be considered for both the Federal Pell Grant *and* financial aid administered by the College (Campus-Based Aid), the Financial Aid Office must electronically receive the student's Institutional Student Information Record (ISIR) from the FAFSA processor. Receipt of the ISIR will allow students to be considered for the following campus-based financial aid, in addition to the Federal Pell Grant:

**Federal Campus-Based Aid**

- Federal Perkins Loan
- Federal Work-Study (FWS)
- Federal Supplemental Educational Opportunity Grant (FSEOG)

**Institutional Campus-Based Aid**

- BCC Foundation Grants

The College administers a number of programs which have been established by private individuals, companies, and organizations. These scholarship and grant programs have varying eligibility requirements. Students who wish to apply for these special scholarships should complete the FAFSA.

### Priority Funding Dates

Fall Semester .....April 1
Spring Semester .....November 1

Incoming students should apply for financial aid when they apply for admission. Because all campus-based funds are limited, students are strongly encouraged to submit the appropriate forms at least four weeks before the above priority dates.

Completed applications received prior to April 1 will be given first priority. Applications received after this date will be considered as long as funds are available, and will be completed in date-received order.

The FAFSA should be mailed to the Federal processor before March 1. After processing, the student will receive an acknowledgment and the College will receive an electronic ISIR from the Federal processor. All students are required to complete a FAFSA, regardless of their eligibility for Federal Pell Grant funding, in order to be considered for any of the Federal financial aid programs.

**Verification**

Once the Financial Aid Office has received the results of your processed application, you may be selected for a process called verification. This is a procedure used to check the accuracy of the information you reported on your federal financial aid application. You may be required to bring or send any supporting documentation that is necessary to verify the information you reported. If selected, you must complete the process before your financial aid can be awarded.

**Notification of Decisions**

Students are generally notified of the action taken on their application beginning in mid-March and continuing on a rolling basis. Students who apply late will be notified as their files are completed.

If a student's request for aid is denied, the reasons for the decision are explained. Students may request an appeal of financial aid decisions by writing a letter to the Director of Financial Aid.

*NOTE* — Students who have been administratively dropped from their class(es) for non-attendance will receive a reduced financial aid award. If financial aid has already been disbursed, a repayment of a portion or all of these funds may be owed to the Federal program.

## Satisfactory Academic Progress for TAP, APTS, and Title IV Aid

Federal regulations require aid recipients to maintain "satisfactory academic progress" before receiving Title IV aid (Federal Pell Grant, Federal Perkins Loan, FWS, FSEOG, Federal Stafford Student Loan, Federal Unsubsidized Stafford Loans and FPLUS). The College also requires satisfactory academic progress before students may receive grant assistance from the BCC Foundation or Educational Opportunity Program (EOP). The guidelines used to determine academic progress are outlined on page 23 of the catalog.

Students who have been placed on academic probation may continue to receive financial assistance while on probation. These students have one semester to achieve the minimum standards before facing dismissal from the College.

Students who have been academically dismissed will be denied aid until they meet the criteria set forth for satisfactory academic progress. Students who petition for a waiver of dismissal may be eligible for financial aid under the following conditions: 1. The student is granted an academic petition due to unusual circumstances; 2. After dismissal the student has completed 6 or more credit hours in a single term and received grades of "C" or better in all credit hours attempted. Only one petition of academic dismissal based on unusual circumstances and only one petition of academic dismissal based on completion of 6 or more credit hours is allowed during a student's educational career.

Students who are allowed to continue taking classes but are not in good academic standing are not eligible to receive financial aid.

The College has also adopted New York State Tuition Assistance Program (TAP) and Aid for Part-Time Study (APTS) guidelines which require good academic standing for students to continue receiving TAP & APTS. Contact the Registrar's Office in Room 105 Student Services Building for a copy of the guidelines.

## Financial Aid Refund Policies and Procedures

Financial aid refunds will be made for those students who receive tuition and fee refunds in accordance with the College's refund policy (see page 15), and for those students who are administratively withdrawn from classes due to non-attendance (see page 25). Students who are administratively withdrawn for non-attendance will lose 100% of the financial aid received for each course that is dropped. All other students may lose a percentage of their financial aid based on the percentage refund of tuition and fees that they receive.

As mandated by Federal law, the institution will credit refunds of financial aid in the following order:

a. To outstanding balances on FFEL Program loans (i.e. Stafford, Unsubsidized Stafford, and PLUS loans);
b. To outstanding balances on Federal Direct loans;
c. To outstanding balances on Federal Perkins loans;
d. To Federal Pell Grant awards;
e. To Federal SEOG awards;
f. To other Title IV aid programs;
g. To other Federal, state, private or institutional aid; and
h. To the student.

## Grants

*NOTE* — The following financial aid information is current as of Fall 2002. Due to reauthorization of the Higher Education Act, some of this information may be changed during the academic year. Please contact the Financial Aid Office for updated or additional information.

| Eligibility | Amount Per Year | Where/ How To Apply |
|---|---|---|
| **TUITION ASSISTANCE PROGRAM (TAP)** | | |
| Summer TAP Awards are available for students taking six or more credits and who are full time the semester before or after the summer semester. | | |
| Full-time student at any accredited college in New York State. Resident of New York State. Income and academic guidelines involved. | $500 to $5,000, not to exceed 100% of tuition. Based on income. | New York State Higher Educational Services Corp. (HESC) 99 Washington Avenue Albany, N.Y. 12255 Forms are mailed to student by HESC; must apply with FAFSA. |
| **VIETNAM VETERANS TUITION AWARD SUPPLEMENT** | | |
| Full-time and part-time students who are US citizens, residents of NY State and served in the armed forces in Indochina between December 22, 1961 and May 7, 1975 who have been discharged from the service under other than dishonorable circumstances. | Up to $1,000 per semester or tuition (whichever is less) for full-time students; Up to $500 per semester or tuition (whichever is less) for part-time students. Cumulative total may not exceed $10,000. | Forms available in the BCC Veterans Services and Financial Aid Office. Full-time students must also apply for Pell and TAP grants; part-time students must apply for Pell grant. |
| **CHILD OF VETERANS AWARD SUPPLEMENT** | | |
| Full-time students that are children of eligible NY State veterans. Eligible veterans must meet specific criteria for eligibility. For further information in regard to eligibility contact the BCC Veterans Service Office. | $450 per year regardless of income or tuition costs for up to four years. In combination with a TAP award may not exceed tuition. | Forms available in the BCC Veterans Services and Financial Aid Office. |
| **AID FOR PART-TIME STUDY (APTS)** | | |
| Part-time students and residents of New York State, must enroll for at least 3 but less than 12 credit hours. Income and academic guidelines involved. | Amount of tuition or less depending on need and availability of funds. | Forms and further information available in BCC Financial Aid Office. Applications must be submitted no later than the end of the tenth week of classes. |
| **EDUCATIONAL OPPORTUNITY PROGRAM** | | |
| Full-time and half-time students with financial need and less than an 82 high school average. Family income must be below a specific level. | Varies according to individual need. Average of $300 per student per academic year. | Application available in the Educational Opportunity Program Office at BCC. |

## Grants

| Eligibility | Amount Per Year | Where/ How To Apply |
|---|---|---|
| **FEDERAL PELL GRANT PROGRAM** | | |
| Accepted and enrolled in at least one class as an undergraduate student with demonstrated financial need. | From $400 to $4,000 annually. | College must receive an electronic Institutional Student Information Record (ISIR) from the Federal processor. Forms available in BCC Financial Aid Office, high school guidance counselor offices, and on-line at www.fafsa.ed.gov after January 1. |
| **FEDERAL SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT (FSEOG)** | | |
| For full-time or half-time students with demonstrated high financial need. Must also be Federal Pell Grant eligible. | Up to $4,000 depending upon need and cost of college expenses. | College must receive an electronic Institutional Student Information Record (ISIR) from the Federal processor. |
| **BCC FOUNDATION GRANTS** | | |
| Full-time or half-time students on a first-come, first-served basis. | Varies according to individual need. | College must receive an electronic Institutional Student Information Record (ISIR) from the Federal processor. |
| **NYS AID FOR NATIVE AMERICANS** | | |
| Full-time and half-time students. | Varies according to individual need and type of award. | Must file annually with the Bureau of Indian Affairs. Applications are available from the US Department of Interior, Bureau of Indian Affairs, Federal Building Room 523, 100 South Clinton Street, Syracuse, NY. |

## Loans

| Eligibility | Amount Per Year | Where/ How To Apply |
|---|---|---|
| **FEDERAL PERKINS LOAN** | | |
| For full-time or half-time students with demonstrated high financial need. Student borrows from the college on own signature. Awarded on a first-come, first-served basis. | From $200-$3,000 per year. Maximum aggregate amount is $15,000. | College must receive an electronic Institutional Student Information Record (ISIR) from the Federal processor. Forms available in BCC Financial Aid Office, high school guidance offices, and on-line at www.fafsa.ed.gov after January 1. |
| **FEDERAL STAFFORD STUDENT LOAN** | | |
| For full-time or half-time students. Student borrows on own signature from a participating bank. Student must show financial need. | Maximum of $2,625 for the first, $3,500 for the second, and $5,500 for the third and fourth years of an undergraduate program – not to exceed a cumulative total of $23,000 for dependent students or $46,000 for independent students. | BCC Federal Stafford Loan worksheets can be obtained at the Financial Aid Office. Applications must be submitted to the Financial Aid Office for processing along with an electronic Institutional Student Information Record (ISIR). |
| **FEDERAL PARENT LOAN FOR UNDERGRADUATE STUDENTS (FPLUS)** | | |
| Loan program for parents of dependent undergraduate students enrolled at least half-time. | No annual or cumulative limits. Loan amounts may not exceed the student's cost of attendance minus other estimated financial aid. Parent borrower will be subject to a credit history review and may be determined ineligible due to an adverse credit history. | Federal PLUS applications can be obtained at most banks, credit unions, or at the Financial Aid Office. Applications must be submitted to the Financial Aid Office for processing along with an electronic Institutional Student Information Record (ISIR). |
| **UNSUBSIDIZED FEDERAL STAFFORD STUDENT LOAN** | | |
| For full-time or half-time students. Student borrows on own signature from a participating bank. No financial need required. Student must make interest payments or capitalize interest payments while attending school. | Same as Federal Stafford Student Loan program. Combination of subsidized and unsubsidized Federal Stafford Student Loans may not exceed annual and cumulative limits for loans under the Federal Stafford Loan program. Independent students may borrow an additional $4,000 above the Stafford Loan limits per year based on cost of attendance minus other aid. | Same as Federal Stafford Student Loan program. |

## Employment

**FEDERAL WORK-STUDY** employment is available for full-time or half-time students with financial need. It is awarded on a first-come, first-served basis.

Students may work up to 20 hours a week when classes are in session or up to 37-1/2 hours a week during vacation. Pay is minimum wage. Forms and additional information are available in BCC Financial Aid Office.

## Financial Aid Time Frame

Students may receive Federal financial aid for only up to 150% of the time/credits necessary to graduate from their program of study (i.e. if the degree requirement equals 60 credit hours, the student may attempt up to 90 credit hours with funding). Beginning with the first semester of matriculation into a degree granting program of study, all college level credit hours (i.e. courses designated at the 100 level or higher) that a student registers for (excluding those dropped during the first week of classes or those never attended) are counted toward this time frame. Credit hours that a student attempts at their own expense also count toward the 150% time limit. Once a student has reached the maximum number of attempted credit hours allowable for their program of study, they are no longer eligible to receive any form of Federal financial aid.

Changes in major do not set back a student's maximum allowable time frame. Rather, a change in major program may impact the total number of credits allowable in either a positive or a negative direction, based on the new degree requirement.

Remedial courses (i.e. those designated below the 100 level) and English as a Second Language (ESL) courses that a student attempts do not count toward the 150% time frame. Students are allowed to attempt up to 30 credit hours of remedial course work and 30 credit hours of ESL course work with Federal funding. Once a student has attempted up to this limit, they are no longer eligible to receive any form of Federal financial aid for additional remedial or ESL course work attempted.

New York State has set up a separate policy in regard to time frames for TAP recipients. Students attending two-year colleges in the State of NY (with the exception of those students enrolled in the Educational Opportunity Program (EOP)) may only receive up to (3) years of TAP payments.

# Academic Information

## Degree and General Requirements

1. Successful completion of all courses for the degree as contained in this Catalog. This includes earning a high school diploma or GED.
2. A 2.00 Cumulative GRADE POINT AVERAGE in those courses applicable to the degree.
3. Filing of an Application for Graduation in the final semester.
4. Recommendation of the faculty that the degree requirements have been met by the student.
5. Satisfaction of all obligations to the College.
6. Specific Curriculum Requirements.
7. Satisfaction of General Education Requirements (see page 21).

Satisfaction of the equivalent of a semester's course of study (12 credits) at BCC. This is the college's *residency requirement* and is most important for transfer students.

### The Associate in Applied Science Degree (AAS)

This degree is awarded to graduates of curriculums in these fields of study.

Accounting
Business Information Management
Chemical Dependency Counseling
Civil Engineering Technology
Computer Information Systems
Computer Technology
Criminal Justice-Police
Dental Hygiene
Early Childhood
Electrical Engineering Technology
Electrical Technology (proposed)
Emergency Medical Technology-Paramedic
Financial Services
Fire Protection Technology
Health Information Technology
Hotel/Restaurant Management
Individual Studies
Industrial Technology
Industrial Technology: Quality Assurance
Marketing/Management/Sales
Mechanical Engineering Technology
Medical Assistant
Medical Laboratory Technology
Nursing
Office Administration
Paralegal
Physical Therapist Assistant
Radiologic Technology
Telecommunications Technology

**Curriculum Requirements**

a. The minimum number of credits in a student's major field as determined by each academic department. These are courses intrinsic to, and required by, the various curriculums.

b. A minimum of 20 credits in Liberal Arts and Sciences courses will include:
   1. Social Sciences: a minimum of 6 credits including 3 in designated citizenship-related courses
   2. Natural and Physical Sciences (including mathematics): a minimum of 6 credits
   3. Humanities: a minimum of 6 credits in designated English courses
   4. Two writing emphasis "W" courses
   5. Satisfaction of General Education requirements. See page 21.

c. Satisfactory completion of all courses in a curriculum or as approved in a department.

d. Summer clinical experience required for graduation in curricula noted.

### The Associate in Arts Degree (AA)

This degree is awarded to graduates in the Liberal Arts and Human Services curriculum.

**Liberal Arts and Human Services requirements are distributed as follows:**

a. English: 9 credits, including ENG 110, 111, and 220.

b. History: a minimum of 6-9 credits including HIS 116 and 117, 130 or 131.

c. Foreign Language: high school exemption or Beginning II

d. Humanities: (3 credits in Literature, Philosophy or Humanities).

e. Mathematics: based on high school preparation and SUNY General Education requirements. See page 73.

f. Natural and Physical Sciences: a minimum of 8 credits.

g. Social Sciences: a minimum of 6 credits including 3 in designated citizenship courses.

h. Electives: 10-25 credits. A maximum of 16 credits may be taken outside the offerings in Liberal Arts and Sciences.

i. Completion of two writing emphasis "W" courses.

j. Physical Education: 1 "Fitness" course credit.

k. Arts: 3 credits in ART, MUSIC, THEATER

l. Satisfactory completion of all courses in a curriculum, or as approved, in a department.

### The Associate in Science Degree (AS)

This degree is awarded to graduates in these fields of study:

Business Administration
Business Administration: International Business
Communication and Media Arts
Computer Science
Criminal Justice - Corrections
Engineering Science
Human Services
Individual Studies
Liberal Arts and Sciences: Science option
Liberal Arts: General Studies
Management

**A.S. Curriculum Requirements:**

a. At least 30 credits in the humanities, natural sciences, mathematics, and social sciences.

b. Physical Education — 1 credit of Fitness PED for Business Administration, Computer Science, Engineering Science, and Liberal Arts and Related Careers students.

c. Two writing emphasis "W" courses.

d. Satisfaction of General Education requirements.

## State University of New York General Education Requirements

**Requirement:** The State University of New York's General Education Requirement applies to all state-operated institutions offering undergraduate degrees. It requires *baccalaureate degree candidates,* as a condition of graduation, to complete a general education program of no fewer than 30 credit hours specifically designed to achieve the student learning outcomes in ten knowledge and skill areas and two competencies. These SUNY General Education Requirements became effective in Fall 2000 for entering students due to graduate with SUNY Bachelors degree in Spring 2004. (State University of New York Board of Trustees, Resolution 98-24, December 1998)

**Community College Participation.** Community colleges were instructed to develop, at a minimum, plans to provide 21 credit hours covering seven of the ten general education subject areas for the A.A. and A.S. students who are planning to transfer to SUNY baccalaureate granting colleges. BCC's plan and courses (shown below) have received "System" approval. Participation in the SUNY-wide General Education Program complements and augments BCC's long-standing General Education goals (see below).

| Knowledge/Skill Areas | Objectives – (Learning Outcomes)<br>Students will demonstrate: | BCC Courses Approved |
|---|---|---|
| **Mathematics** | Competence in the following quantitative reasoning skills:<br>• Arithmetic<br>• Algebra<br>• Geometry<br>• Data Analysis<br>• Quantitative reasoning. | MAT 120 and above<br>BUS 115 |
| **Natural Sciences** | • understanding of the methods scientists use to explore natural phenomena, including observation, hypothesis development, measurement and data collection, experimentation, evaluation of evidence, and employment of mathematical analysis.<br>• application of scientific data, concepts, and models in one of the natural sciences. | BIO 111, 112, 115, 131, 150, 155, 200<br>CHM 120 and above<br>PHY 118 and above<br>PHS 111 and above |
| **Social Sciences** | • understanding of the methods social scientists use to explore social phenomena, including observation, hypothesis development, measurement and data collection, experimentation, evaluation of evidence, and employment of mathematical and interpretive analysis: and<br>• knowledge of major concepts, models, and issues of at least one discipline in the social sciences. | ANT 111, BUS 116<br>ECO 110, 111<br>GEO 120, PSY 110<br>SOC 110, 111<br>SOS 101, 111, 116, 120, 126, 155<br>POS 201, 203, 204 |
| **American History** | • knowledge of a basic narrative of American history: political, economic, social, and cultural, including knowledge of unity and diversity in American society.<br>• knowledge of common institutions in American society and how they have affected different groups.<br>• understanding of America's evolving relationship with the rest of the world. | HIS 130, 131 |
| **Western Civilization** | • knowledge of the development of the distinctive features of the history, institutions, economy, society, culture, etc., of Western Civilization; and<br>• relate the development of Western Civilization to that of other regions of the world. | HIS 100, 116 *and* 117<br>HUM 101, 102 |
| **Other World Civilizations** | • knowledge of either a broad outline of world history, or<br>• the distinctive features of the history, institutions, economy, society, culture, etc., of one non-Western civilization. | HIS 116 and 117, 141, 162 |
| **Humanities** | • knowledge of the conventions and methods of at least one of the humanities in addition to those encompassed by other knowledge areas required by the General Education program. | All Literature (LIT), Philosophy (PHI) (excludes PHI 120 & 202)<br>HUM 101, 102, 103<br>COM 145, 200; ENG 220<br>ART 102, 103, 104, 108, 109, 110<br>MUS 101, 111, 112, 114<br>THR 101, 102, 221, 222<br>SPA 204, 207 |
| **The Arts** | • understanding of at least one principal form of artistic expression and the creative process inherent therein. | ART 102 thru 140,<br>COM 145, 200, 205,<br>MUS 101, 105, 108, 109, 111, 112, 114, 188; PED 135, 137<br>THR 101, 109, 110, 111, 112, 114, 117, 151, 152, 161, 165, 175 (excludes THR 121, 140) |
| **Foreign Language** | • basic proficiency in the understanding and use of a foreign language; and<br>• knowledge of the distinctive features of culture(s) associated with the language they are studying. | FRE 102, SPA 102, ITA 102,<br>GER 102, RUS 102 |
| **Basic Communication** | Students will:<br>• produce coherent texts within common college-level written forms;<br>• demonstrate the ability to revise and improve such texts;<br>• research a topic, develop an argument, and organize supporting details;<br>• develop proficiency in oral discourse; and<br>• evaluate an oral presentation according to established criteria. | ENG 110, 111, 150, 220, 108 |
| **Critical Thinking (Reasoning)** | Students will:<br>• identify, analyze, and evaluate arguments as they occur in their own or others' work; and<br>• develop well-reasoned arguments. | Courses across the curriculum incorporate these learning goals; ENG 110/111 and 220 explicitly target these learning outcomes. |
| **Information Management** | Students will:<br>• perform the basic operations of personal computer use;<br>• understand and use basic research techniques; and<br>• locate, evaluate & synthesize information from a variety of sources. | Courses across the curriculum incorporate these learning goals; ENG 110/111 explicitly target these learning outcomes. |

Students who do not complete the 30 credit SUNY General Education Requirement at BCC will have to complete the remainder while attending a 4 year SUNY institution.

## General Education at BCC

Broome Community College's General Education program strives to ensure that each graduate will:

1. **communicate effectively orally and in writing and acquire information management skills. (SUNY#10) (SUNY #12)**
   - Students take ENG 110, and/or 111, and 220, and two writing emphasis (W) courses; information management skills are taught in a variety of courses across the curriculum.
2. **think clearly and critically. (SUNY #11)**
   - Students will achieve competence in critical thinking in courses across the curriculum.
3. **become sensitive to the ethical dilemmas of daily life and experienced in moral reasoning, discourse, and judgment. (SUNY #11)**
   - Courses in various programs will integrate moral reasoning and argument; social science/ civic education courses explicitly include moral reasoning in student learning outcomes.
4. **exercise one's right and obligation to be informed about and participate competently in civic affairs. (SUNY #3)**
   - Students take designated social science courses which address this goal.[1]
5. **acquire a global outlook and appreciate human and cultural diversity. (SUNY #6)**
   - in addition to study of non-western cultures required in many transfer programs, global and cross-cultural inquiry is integral to social science courses.
6. **gain facility in quantitative analysis, and acquire knowledge of scientific and technological concepts, procedures, achievements, and concerns. (SUNY #1) (SUNY #2)**

[1] ECO 110/111, SOC 110/111, SOS 101/111/120, HIS 130/131, POS 201/203, CTP 275

### Writing Emphasis Courses

Approximately fifty courses have been designated "writing emphasis" ("W") offerings. In these courses, writing about the subject matter being studied is an integral part both of the learning process and the course objectives. To fulfill General Education requirements, students must complete 2 writing emphasis ("W") courses. These "W" courses are one to be taken after completing ENG 110 and at least before enrolling in ENG 220. Students should consult the Master Schedule at each registration period, as well as their advisors, in choosing "W" courses.

### Writing Emphasis Module

The independently arranged "W" course module is intended for students preparing to graduate who, through oversight or scheduling problems, lack the required two "W" (writing-emphasis) courses. Transfer students who have completed general education courses at another institution but not in "W" modes could avail themselves of the "W" module to fulfill "W" requirements, in some instances. "Hardship" cases for a "W" module shall be limited to students in their last semester who intend to graduate and who will have met all other graduation requirements at the end of that semester. This module is not intended to act as a substitute for a department's or curriculum's "W" course. It does not exempt students from trying to fulfill "W" requirements.

### Waiver of Degree Requirements

Students seeking waivers of degree requirements should consult their program chairpersons.

### Dual Degree Award

Students seeking two degrees from the college should consult their chairpersons and/or deans to determine their eligibility under State University of New York guidelines.

## Graduation

Broome Community College will conduct one formal graduation ceremony each year in the spring. All candidates for degrees may participate in the ceremony. A candidate is a student who will complete his/her degree requirements at the conclusion of the fall, spring, or summer semester. Candidates must have filed their "Application to Graduate" and have been recommended as candidates by the chairperson of their academic department. Students who complete their degree requirements at the end of the fall semester will be invited to attend the next graduation ceremony.

## Declaration of Graduation Candidacy

Students intending to complete all degree requirements within a given semester are required to declare their intention to do so by filing an "Application for Graduation" with the Office of the Registrar.

Applications for Graduation should be filed by:

Spring Semester — March 14

Summer Semester — July 15

Fall Semester — October 15

Students filing after these dates will be considered as graduates for the semester but may not receive their diplomas in a timely fashion or have their names indicated in the Commencement Booklet (Spring semester). No application for candidacy will be accepted after the last day of classes of the term being applied for. Students applying after that date will be considered graduates of the following semester, or of the semester/year in which they file a candidacy form.

## Graduation with Honors

Students who graduate with a cumulative grade point average of 3.80 or better will receive the distinction of graduating with "High Honors" and those who graduate with a cumulative grade point average between 3.50 and 3.79 inclusive will graduate with "Honors."

## Certificate Programs

Broome Community College also has certificate programs which are less than two years in length, have more specific objectives than the associate degree offerings, and consist of about one year of college credit. Some are designed to prepare students for jobs that require specialized higher education, but not necessarily a college degree; some provide students with an opportunity to upgrade their academic backgrounds or expand their qualifications for a particular field of study; and some offer college credits and additional training for people already working in the field.

Most of the certificate offerings carry college credits, and can lead a person into some of Broome Community College's degree-granting curriculums. They can be taken on a full-time or part-time basis, and most of them are offered in the evening although some are available through day classes only. No specific high school courses are required for enrollment.

### Certificate Programs

1. Business Skills
2. Desktop Publishing
3. Dietary Manager
4. Early Childhood
5. Industrial Technology
6. Medical Transcription
7. Office Technology
8. Paralegal Certificate
9. Phlebotomy
10. Records Information Management
11. Website Development and Management

# Standards for Academic Progress

## Minimum Grade Point Average

In order to be in good academic standing and to be making academic progress toward a degree or certificate, a student must meet a minimum cumulative grade point average and successfully accumulate credits according to the following standards:

**1) Grade Point Average**

| Credits Attempted | Minimum Cumulative GPA |
|---|---|
| 12-20 | 1.50 |
| 21-40 | 1.75 |
| 41-upward | 2.00 |

**2) Successful Accumulation of Credits**

Students must successfully pass ("D" grade or better) a total number of credits according to the following standard:

| Credits Attempted | Credits Earned |
|---|---|
| 20 | 12 |
| 40 | 24 |
| 60 | 36 |
| 80 | 48 |
| 100 | 60 |
| 120 | 72 |
| 140 | 84 |
| 160 | 96 |

"Credits attempted" include all credit hours for which the student was registered after the first week of a semester, regardless of later dropping or withdrawal from course. "Credits earned" excludes those credit hours associated with grades of "F", "W", or "I" (Incomplete).

By the time a student has attempted 20 credits, he/she must have successfully earned 12 credits. Likewise, 40 credits trigger the 24 credit minimum requirement. Any course in which a student is enrolled past the first week of classes is considered an attempted hour. Developmental courses do not give earned credit toward a degree at the college, but they are equivalent to the appropriate number of earned credits for academic standing.

## Probation

Students' records will be reviewed at the end of each semester by the Registrar. Students who have not met the minimum cumulative standards will be placed on probation. During this probationary time, the student is expected to remain in contact with his/her advisor, department chairperson, or division dean. General standards for students on probation are: (1) completion of 50% or more of coursework attempted; (2) achievement of the minimum cumulative GPA (see Grade Point Average above). Other probationary standards may be required, such as limitation on total credit hours taken in the probationary semester, or specified courses, or regular meetings.

### Continued Probation

Once on probation, a student must achieve a minimum *semester* GPA of 2.00, and must complete/earn at least 50% of his/her attempted credit hours for the *semester* to avoid dismissal. Students who meet these minimum probationary standards but still do not meet the minimum cumulative standards for academic progress will continue on probation.

## Dismissal

If a student does not meet the minimum probationary standards at the end of the probationary semester, the student will be dismissed from the College. Notification of dismissal will be sent by the College Registrar.

### Attendance After Dismissal

To continue in attendance, a dismissed student must submit a *Petition for Academic Continuance* to his/her Divisional Dean. Petitions can be obtained from the Dean's Office. Based on a review of the student's academic record and discussions with the student, the Dean will determine the student's status as follows:

**Petition Dismissal:**

1. In rare cases clearly documented "extenuating circumstances" directly contributing to the student's academic failure may be considered by the Divisional Dean. A student may receive only one such petition for "extenuating circumstances" during his/her enrollment at the College.

**Part-Time Enrollment:**

2. With the dean's approval, a student may continue in the next semester on a part-time basis. The intent of allowing such part-time enrollment in an approved course of study is to afford the student the opportunity to complete a successful semester. Students permitted to attend on a part-time basis who successfully achieve "C" grades or better in *two or more* courses approved by the dean will be allowed to return to full-time status in the following semester.

In either case, the student will continue on probation for the following semester and will be expected to meet the minimum probationary standards to avoid dismissal. A dean's waiver does not guarantee continuity of financial aid.

**Denial of Petition/Leave of Absence and Readmission:**

3. The Divisional Dean may deny the student's petition. Following absence from the college for a semester or more, students must reapply for admission and petition the dean for continuance of study.

## Academic Grievance Procedure

Information about the academic grievance procedure is available in the Student Handbook and through the Office of the Vice President for Academic Affairs.

## Academic Standards for Clinical Education

Academic Standards for Clinical Education in the Health Sciences Division programs require dismissal of students who fail to meet established academic objectives for the physical safety, psychological safety, and confidentiality of patients.

## Dismissal/Readmittance for Degree Programs

This policy applies to the following programs: Dental Hygiene, Medical Assisting, Medical Laboratory Technology, Nursing, Business Information Technology curriculums, Physical Therapist Assistant, and Radiologic Technology.

A student must demonstrate discernable progress toward the achievement of a degree in a given program of study. If a student fails one or more introductory courses in a major sequence, as determined by the department, he/she may be dismissed by the department from that program of study — but not necessarily from the College.

To be considered for readmission to the program, the student must meet with the appropriate Department Chairperson who will make the determination. In the case of programs that have limited space for freshmen, the Admissions Office will notify the student of his/her readmittance into the program and adjust accordingly the number of spaces available for new freshmen. A maximum of 10% of the total number of available spaces for freshmen in a program may be used for readmitted students.

## Grading Information

This grading policy was adopted by the College commencing with the Fall 1992 semester.

### Letter Grade System

| Grades | Quality Points per Credit Hours | Explanation |
|---|---|---|
| A | 4.0 | Superior Achievement |
| A– | 3.7 | |
| B+ | 3.3 | |
| B | 3.0 | Commendable Achievement |
| B– | 2.7 | |
| C+ | 2.3 | |
| C | 2.0 | Satisfactory Achievement |
| C– | 1.7 | |
| D | 1.0 | Minimal Achievement |
| F | 0.0 | Unsatisfactory or withdrawal after 10th week |
| S | — | Satisfactory |
| U | — | Unsatisfactory or withdrawal after 10th week |
| W | — | Withdrawn from a course between the 4th and 10th week (See "W" Grade below) |
| I | — | Incomplete due to special circumstances (See "I" grade conditions) |
| IP | — | "In Progress" for courses in which student is permitted one additional semester to complete |
| AU | — | Audit |

### Grade Point Average

Each grade carries a specified number of honor points — 4.0 for an A, 3.7 for an A–, 3.3 for a B+ — as described in the section on Grading Information. To determine a student's grade point average, multiply the number of honor points earned, according to the letter grade, by the number of credits for the course. Add these together and divide the sum by the total number of credits.

A grade point average (GPA) is calculated for each semester the student attends, and a cumulative summary is also shown on the student's grade report and academic transcript.

For purposes of graduation eligibility, only those courses required for the degree will be used to determine if the criteria have been met for a 2.0 in courses applicable to the degree. This calculation will reflect the Program grade point average in the student's field of study and will be fixed as of graduation. Any courses taken after that will not change the graduation GPA and will not be entered into the previous GPA in any way. The cumulative GPA, however, will reflect all courses taken by the student unless a course has been repeated.

### "S" and "U" Grades

The S and U grade will apply only to specific courses determined by the appropriate departments and approved by the Vice-President for Academic Affairs. Such courses will not affect the Grade Point Average (GPA).

### "W" Grade

It is the student's responsibility to initiate action to receive a grade of W within the 4th and 10th weeks inclusive. Students cannot receive a "W" grade after the 10th week.

"W" or "F" grade periods for courses which meet for less than a full semester will be determined by the Registrar's office.

### "I" Incomplete Grade

An "I" or incomplete grade signifies that coursework cannot be completed during the term due to extenuating circumstances.

The "I" or incomplete grade shall be assigned by instructors only in cases where they have agreed to grant students extensions to complete coursework and a contract has been arranged between the student and instructor.

To petition for an "I" grade, the student must contact the instructor prior to the last class to arrange for the completion of the unfinished work. The instructor will file with the Office of the Registrar an "Incomplete Contract" form, outlining the provisions to complete the "I" grade, including *an agreed upon time limit that shall not exceed the last day of the next major semester.* The instructor may grant an extension for an additional semester by completing another "I" Contract.

After the student has completed the work, the instructor will submit a "Notification of Grade Change" form to the Registrar for removal of the "I" grade. If the student does not meet the time limit, the instructor shall direct the Registrar to record the appropriate grade.

When the Registrar is not notified by the instructor of a grade change, the Registrar will convert the "I" grades to "F" or "U" at the end of the next semester.

An instructor submitting a grade change for an "I" grade which has been converted to an "F" must follow the normal grade change provisions.

An "I" grade will be treated as an "F" or "W" grade in the calculation of academic progress. If a student is academically dismissed during the semester in which an "I" grade was granted, subsequent passing of the course will not rescind the academic dismissal.

### "IP" Grades

Some Developmental Courses allow the assignment of an "IP" or In-Progress grade when the course may require more than one semester to repeat. The student must re-register for the course. When the course is completed, the student will receive the grade assigned (generally an "S" or "U" in the last semester and the prior "IP" grade will be retained).

If the "IP" is not completed (the student does not re-register or leaves the institution), the former "IP" grade will be changed to a "U" at the beginning of the first semester (Spring or Fall only) in which the student has not re-registered for the course.

A student can receive the grade of "IP" only once for a course.

### Audit

The term "Audit" designates a status, not a grade. The letters AU will appear next to the course name on the transcript. See page 29.

### Repeating Courses

Permission of a matriculated student's department chairperson or divisional advisor is required in order to:

a. repeat a failed course more than once.

b. repeat a course in which a student has received a passing grade.

If a course is repeated, the higher grade will be included in the cumulative grade point average. If a required course is failed, the department or the dean may allow the student to substitute an equivalent or similar course rather than repeat the failed course. In such cases, the higher grade will be included in the cumulative grade point average. All grades will appear on the student's transcript.

A course in which a grade of W was previously received is not considered a repeat.

Students repeating a course they have already passed (a "D" grade or better) may not be able to use that course as part of their calculation for full-time status for certification under the New York State Tuition Assistance Program (TAP) and should be advised to check with the Office of the Registrar before registering for the repeat course.

### Grades Appeals

Broome Community College has established a procedure to provide students an opportunity to appeal grades in any particular course(s) or academic dismissal. Copies of the Student Academic Appeal procedure are available in the offices of the Divisional Deans. The policy also appears in the Student Handbook.

### President's/Dean's List

Full-time students who have a semester grade point average 3.80 or better will be named to the President's List. Such students must successfully complete a minimum of 12 credit hours and have no "I" grade for that semester. *Courses which use the S or U or credit equivalent grade may not be among the 12 hours.*

Full-time students who have a semester grade point average between 3.50 and 3.79 inclusive will be named to the Dean's List. Such students must successfully complete a minimum of 12 credit hours and have no "I" grade for that semester. *Courses which use the S or U or credit equivalent grade may not be among the 12 hours.*

Part-time students can earn a place on the President's or Dean's List by having the appropriate cumulative grade point average for their most recent semesters that include at least 12 credit hours and have no "I" grades for those semesters. *Courses which use the S or U credit equivalent grade may not be among the 12 hours.* Part-time students should contact the Registrar's Office if they have the appropriate grades.

## Registration and Student Status

### Late Registration:

Late registration for credit courses may be permitted during the first week of classes depending on program and course availability. However, no students will be admitted to any class after the 2nd week of that class.

A late initial registration fee will be charged during the week in which late registration is permitted.

Exceptions to this regulation may be made by a Division Dean.

### Dropping a Course:

For a student to drop a course, an official "Drop/Add" form needs to be signed by the Department Chairperson or an authorized College Advisor, and filed with the Registrar.

Telling the instructor, or any office other than the Registrar's, by any means other than in writing on an official Drop/Add form, is NOT sufficient notice of withdrawal.

One exception to the above rule is schedule changes necessitated by adding or dropping sections. In these instances, the process may be initiated by the Department or the Registrar.

The College reserves the right to administratively withdraw any student from any course for non-attendance. This may affect a student's academic standing since such dropped courses will be considered credits attempted (see Attendance Regulations on following page for further information).

Full semester courses may be officially dropped by students without receiving a "W" only within the first four weeks of class. Courses dropped within the fifth and tenth weeks result in a "W" for the dropped course. "W" or "F" grade periods for courses which meet less than full semester will be determined by the Registrar's Office.

### Adding a Course:

Through the first week of classes, students may add courses with an official Drop/Add form signed and authorized by a College Advisor.

After one week of classes, the addition of courses or changing of sections requires the approval of the divisional dean or his/her designee. The primary exceptions are courses where, upon advisement, a student may move to a lower level course.

In all cases, students must file the "Drop/Add" forms in order to become officially registered in additional courses.

Students who attend classes in which their names do not appear on the class list will be referred to the Registrar. Students are required to then present an official approved "DROP/ADD" form to the instructor.

### Withdrawal from Full-Time Studies:

Students who decide to withdraw from the College must complete the proper termination forms available from the ACCESS Center. Failure to officially withdraw may cause the individual to lose any possible refund of tuition. In addition, the student may receive an "F" grade for all courses.

### Withdrawal from the College

Broome Community College has committed to a philosophy of providing whatever assistance is necessary to aid the student in completing his/her academic goals. Students are strongly encouraged to seek academic and personal counseling prior to any withdrawal.

Any student who decides to withdraw from the College must obtain a signed drop form from their department and complete a withdrawal form. The withdrawal form is available in the ACCESS Center. Failure to comply may cause the individual to lose any possible refund fees or may negatively impact future financial aid resources.

#### Medical Withdrawal:

Verified medical or psychological reasons directly preventing the student from completing classes may be considered by the Divisional Dean for medical withdrawal. A student must begin the process by completing a drop form and obtaining an application for medical withdrawal at the Registrar's Office.

A medical withdrawal, if approved, will be noted on the student transcript. Medical withdrawal has no effect on the student's refund eligibility. (See BCC Refund regulations pg. 15.)

A medical withdrawal for a prior semester must be completed by the end of the semester in which the student returns to the College.

Granting of a Medical Withdrawal for a semester does not guarantee an override of academic dismissal status or financial aid eligibility. Students will need to file a petition for academic continuance.

### Fresh Start

Any student absent from Broome Community College for four or more consecutive major semesters (excluding summer terms) may return and obtain a "Fresh Start," if their cumulative G.P.A. was below 2.0.

Under this procedure, a student will receive credit and retain on his/her transcript the grades for all courses previously passed with a grade of "C" or above, but these grades will not be calculated in the student's cumulative grade-point average (GPA). A student will receive no credit for courses in which he/she received a "C-" or below prior to the absence. All courses and grades will remain on a student's transcript.

Following the granting of a "Fresh Start," a minimum of twelve (12) credits must be completed before the student will be eligible for graduation.

If the student has been academically dismissed prior to return under the "Fresh Start" policy, he or she will be considered on probation upon return and must: (1) complete 50% or more of the classes attempted past the first week; (2) achieve a 2.0 grade point average for the semester. Failure to do so will result in academic dismissal from the College.

This "Fresh Start" option may be used only once and cannot be applied to a previous degree. When a "Fresh Start" is granted, the following notation will be made on the student's transcript: "Student Granted Fresh Start."

A "Fresh Start," once granted, may not be rescinded at any time.

To initiate a "Fresh Start", students may obtain a request for such action from the Registrar's office, their Dean's office or the ACCESS Center.

### Changing Curriculum

Any student wishing to change curriculum must request a "Change of Curriculum" form from the Registrar's Office. It must have the approval of the new division dean/designee or department chairperson and the signature of the current division dean/designee or department chairperson.

The Change of Curriculum Policy is administered under the following criteria:

1. All previous courses and grades will remain on the permanent record.
2. The academic standing of the student at the time of the Change of Curriculum will be maintained. For example, a student on probation at the time he or she applied for the change will remain on probation. Students who have been dismissed must file a petition with the dean of the division which sponsors the new curriculum.
3. The student will be bound by the graduation requirements of the current catalog at the time of the curriculum change.

### Semester Credit Overload

During the Fall and Spring semesters, no student may enroll (register) for more than 20.5 credits without approval from their divisional dean.

During the Summer semester, no student may register for more than 6.0 credits in any one summer term or take more than 12.0 credits for all summer terms without permission from their divisional dean.

### Length of Curriculum

Most associate degree programs are designed to be completed in two years. The college year is divided into two semesters of 15 weeks each plus an evaluation week. Some students may choose or be required to take more than four semesters to earn their degrees. Radiologic Technology students, for example, have special clinical laboratory experiences in the summer of their freshman year.

### Procedure for Student Name Change

If a student wishes to change his or her name at Broome Community College, the following policy and procedure must be used by the requestor:

Name change form must be filled out and turned into the Registrar's Office. Name change will be done with the proper documentation. Proper documentation may include any one of the following items:

1. A copy of name change on Social Security card or approved SS form.
2. A State Driver's License (picture) showing the name change.
3. Legal document changing the name.
4. Marriage license, wedding announcement from newspaper, or divorce decree.
5. Other documentation, at the discretion of the Registrar.

A copy of the above documentation should be made by the Registrar's office and placed in the student's folder. Name change goes to the Computer Center for processing.

### Credit Equivalent

Some courses at Broome Community College carry "credit equivalents." This means that they do not give a student credit toward a degree at the College, but they are equivalent to the appropriate number of credits for calculating academic loading and tuition. This credit load is used, to cite some examples, for determining a student's status as full-time or part-time, for financial aid, for billing, and for academic standing. Courses carrying these credit equivalents fall in the 090 numbering series. Examples are: ENG 090 Basic Language Skills; MAT 090 Foundations of College Mathematics I; RDG 090 Reading Fundamentals; RDG 092 College Preparatory Reading. (See Developmental Courses on page 27.)

## Classroom Practices

### Attendance Regulations

#### General Policy

Colleges throughout the nation have found that students who regularly attend classes have a better success record than students who do not regularly attend classes. With the intent of encouraging student success, BCC strongly urges students to regularly attend their classes. In fact, the College's policy is that a student is expected to come to all class sessions prepared to participate in an appropriate manner. Absence from class is considered a serious matter and never excuses a student from classwork. A student must complete all assignments, examinations, and other requirements of any course, to receive credit.

Absence from class may also affect a student's academic standing and eligibility for financial aid if student is administratively dropped for non-attendance. (See Deregistration below.)

The College understands, however, that students sometimes, due to uncontrollable circumstances, are absent from classes. In these cases, the students need to meet with their instructors to discuss missed work.

#### Department Exceptions

Within the spirit and framework of College policy, each department may develop its own guidelines to meet its needs. Such guidelines are subject to the approval of the Vice-President for Academic Affairs. NOTE: Some developmental courses have strict attendance requirements, whereby students may be deregistered from the class for poor attendance. This deregistration may result in a loss of financial aid. The consequences of this loss may be that the student must return financial aid monies to the College. Consult the course outline and/or the instructor for further details.

#### Deregistration

The College is required to administratively deregister a student for a course(s) based on lack of attendance as reported by the instructor of the course on the Official Section Attendance Sheet. Students who have never attended the section or have not attended after the census date (first day of the fourth and ninth week of classes for full-term courses) will be deregistered from the course by the Registrar's Office and notified of this action, which may result in a loss of financial aid.

Students enrolled in on-line courses must log on at least once a week to be considered attending.

*Students who are administratively dropped for non-attendance during the semester continue to have a tuition and fee obligation.*

#### Absence due to Religious Beliefs

Section 224-a of the State Education Law reads:

1. No person shall be expelled from, or be refused admission as a student to, an institution of higher education for the reason that he/she is unable, because of his/her religious beliefs, to attend classes or to participate in any examination, study or work requirements on a particular day or days.
2. Any student in an institution of higher education who is unable, because of his/her religious beliefs, to attend classes on a particular day or days, may be excused from any examination or any study or work requirements.
3. It shall be the responsibility of the faculty and of the administrative officials of each institution of higher education to make available to each student who is absent from school, because of his/her religious beliefs, an equivalent opportunity to make up any examination, study or work requirements which he/she may have missed because of such absence on any particular day or days. No fees of any kind shall be charged by the institution for making available to the said student such equivalent opportunity.
4. If classes, examination, study or work requirements are held on Friday after 4 p.m. or on Saturday, similar or makeup classes, examinations, study or work requirements shall be made available on other days, where it is possible and practical to do so. No special fees shall be charged to the student for these classes, examinations, study or work requirements held on other days.
5. In effectuating the provisions of the section, it shall be the duty of the faculty and of the administrative officials of each institution of higher education to exercise the fullest measure of good faith. No adverse or prejudicial effects shall result to any student because of his/her availing himself/herself of the provisions of this section.
6. Any student, who is aggrieved by the alleged failure of any faculty or administrative officials to comply in good faith with the provisions of this section, shall be entitled to maintain an action or proceeding in the supreme court of the county in which such institution of higher education is located for the enforcement of his rights under this section.

6-a. A copy of this section shall be published by each institution of higher education in the catalog of such institution containing the listing of available courses.

7. As used in this section, the term "institution of higher education" shall mean schools under the control of the Board of Trustees of the State University of New York or of the Board of Higher Education of the City of New York or any community college.

### Student Cheating

An instructor has the prerogative of failing a student who has cheated on an exam, quiz, paper, project, report, etc. for that exercise only. Students who cheat a second time risk failure of the entire course and additional disciplinary action, including the possibility of dismissal from college.

### Classroom Decorum

Students are responsible for completing all course requirements as specified in the course outline. They are also obliged to be on time to class and to treat their instructors and fellow students respectfully.

Individuals who are disruptive and whose behavior adversely affects the learning of fellow students, may be removed from class.

# Supplemental and Alternative Learning Opportunities

## Learning Assistance Center

### Reading and Study Skills Center

Professional reading teachers are available in the Reading and Study Skills Lab to assist all students in improving their reading or in mastering the art of studying efficiently and effectively. Students may choose to work with a study skills specialist or to work independently on multi-media programs on such topics as efficient time management, effective notetaking techniques, reading and remembering textbook material, or improving performance on exams. Computer programs on vocabulary improvement and speed reading are also available. Instruction is arranged by appointment according to the student's schedule.

### Math Lab

The Mathematics Lab is available to all BCC students looking for a location conducive to working on math homework, preparing for math quizzes or tests and in need of tutorial assistance. Assistance for all courses ranging from Arithmetic through Calculus is provided by an experienced staff of professional tutors along with members of the Mathematics Department faculty. Tutorial computer software is also available. Students may stop in for help without an appointment and can use the lab on a daily basis if desired. Appointments can be made on an individual basis for students experiencing problems that may require an extended amount of time to address. The Math Lab is located in the Library and is open daily, Monday through Friday, and four evenings per week, and for limited hours on weekends.

### The Writing Center

Serving as a resource to the entire campus, our staff of professional tutors can assist any student writing for any course. We offer one-on-one and small-group tutoring, peer review sessions, writing workshops and on-line tutorial assistance. We work with faculty to strengthen the quality of writing instruction and writing at BBC. Our tutors are eager to help students in all courses across the curriculum – regardless of their level of experience, expertise or confidence as writers. All writers, including those who are already proficient, can benefit from discussing their writing with tutors. In addition, we can assist students with other forms of writing, such as resumes, college application essays, or letters. The Writing Center provides software and computer-assisted instruction to help writers at different stages of the writing process, we offer an extensive collection of handouts and reference books. Many students view the Center as a supportive, collaborative writing environment.

For the convenience of the campus community, the Center has both day and evening hours. Schedule appointments in person (L-6) or by telephone (778-5333, 778-5038). Walk-in tutorial appointments are available on a very limited basis. For students who can't visit the Center in person, we offer on-line writing consultations. Visit our website at http://www.sunybroome.edu/writecenter.

### Peer Tutoring

The Faculty-Student Association and the Student Support Services Program fund a peer tutoring program, which offers one-to-one or small group instruction to any student experiencing difficulty with a course. Tutoring takes place in the Learning Assistance Center, and tutors are trained and supervised by the Program Coordinator.

The Center is open from 8:30 a.m. to 8 p.m., Monday through Thursday, and from 8:30 a.m. until 4 p.m on Friday. Detailed brochures describing the various programs are available at the reception desk at the Center or you may call 778-5038 for information.

### Peer Assisted Learning Sessions (PALS Program)

Research has shown that one of the best ways to learn course material is through active study with other students. At BCC, the PALS program provides structured group study and review sessions for all students enrolled in challenging courses. A PALS leader has successfully completed the course in a prior semester. In the session, the leader helps students master course concepts and improve their reading, note taking, and critical thinking skills. Your advisor will know which courses have PALS attached to them, or you may contact the Learning Assistance Center at 778-5038.

### Learning Disabilities Program

The Learning Disabilities Program offers specialized services to students with identified learning disabilities (LD) and/or attention deficit disorders (ADD/ADHD). The program also serves students who suspect they may have an undiagnosed learning disability or attention deficit disorder.

Students must provide the college with disability documentation to be eligible for services. Documentation records include copies of psychological reports, IEP's, and/or physician's reports. Eligible students work with the Learning Disabilities Specialist to determine appropriate academic accommodations, receive instruction in specific academic skills, identify learning and study strategies, review academic advisement/planning, and develop self-advocacy skills. Eligible students may arrange for testing accommodations, readers, notetakers, tutors and specialized equipment use through the Student Support Services Program.

Students who suspect they have a learning disability or attention deficit disorder may meet with the Learning Disabilities Specialist to discuss individual situations. Based upon an initial screening, students who are in need of evaluation may be administered a diagnostic assessment on campus. If a disability is discovered, the student is then eligible for the services described above.

The Learning Disabilities Program also provides consultative services to faculty/staff, tutors, and community organizations involved in the education of students with learning disabilities and attention deficit disorders.

## Developmental Courses

Various courses are offered through various departments for those desiring skill improvement or review. Some of these carry credit; others do not. The non-credit courses listed below prepare students for credit level work in the basic skills areas of mathematics, writing and reading. These non-credit courses are equivalent in time to credit bearing classes and are applicable toward athletic eligibility.

Developmental courses graded on a letter basis (A, A–, B+, etc.) will not be calculated in the student's semester grade point average and they may not be used for the determination of Academic Honors such as Dean's or President's List. (See page 24.)

| | Courses | Credit or Equivalent | Catalog Page |
|---|---|---|---|
| CHM 090 | Preparatory Chemistry | 0 or 4 | 118 |
| ENG 090 | Basic Language Skills | 0 or 4 | 128 |
| MAT 090 | Foundations for College Mathematics I | 0 or 4 | 137 |
| MAT 092 | Foundations for College Mathematics II | 0 or 4 | 137 |
| MAT 095 | Metric Conversions and Dosages | 0 or 1 | 137 |
| MAT 096 | Elementary Algebra and Trigonometry | 0 or 5 | 137 |
| MAT 097 | Intravenous Medications and Pediatric Dosages | 0 or 1 | 137 |
| PHY 090 | Preparatory Physics I | 0 or 4 | 147 |
| RDG 090 | Reading Fundamentals | 0 or 4 | 150 |
| RDG 092 | College Prep Reading | 0 or 4 | 151 |
| RDG 094 | College Vocabulary Skills | 0 or 2 | 151 |

NOTE: ENG 090, MAT 090, 092, RDG 090, 092 have strict attendance requirements, whereby students may be deregistered from the class for poor attendance. This deregistration may result in a loss of financial aid. Consult course outline and/or instructor for further details.

Other developmental courses may be credit bearing. Students should pay close attention to catalog information pertaining to these courses and should consult their department chairpersons or Learning Assistance personnel about the acceptability of credit in a particular degree program.

| | Courses | Credit or Equivalent | Catalog Page |
|---|---|---|---|
| LRS 101 | Study Management | 0.5 | 137 |
| LRS 102 | Memory and Exams | 0.5 | 137 |
| LRS 103 | Textbook Mastery | 0.5 | 137 |
| LRS 104 | Listening and Notetaking | 0.5 | 137 |
| LRS 105 | Learning Skills | 2 | 137 |
| LRS 106 | College Success | 3 | 137 |
| LRS 120 | The Art of Thinking | 1 | 137 |
| LRS 130 | Intro to Microcomputers and Word Processing | 2 | 137 |
| LRS 150 | Advanced Learning Skills | 3 | 137 |
| SAC | Student Affairs Courses | 2-3 | 151 |

### College Level Examination Program (CLEP)

The College will recognize successful achievement at or above the 50th percentile on **CLEP subject exams** in accordance with SUNY and American Council of Education guidelines. Approval of credit for degree requirements or electives is determined by the appropriate department. Credit approval will be handled as transfer credit. Under certain circumstances, a department may accept general examination scores.

### BCC Credit by Examination (CBE)

The College in many instances provides for full or part-time BCC matriculated students credit by examination for knowledge gained outside the traditional classroom situation. A letter grade will be posted on the student's transcript upon completion of the exam. Guidelines for this procedure are available from the College's chairpersons and deans. If a student receives an "F" grade after normal completion of a course, no credit by examination may be given in that subject. (Fees, page 14.)

### Portfolio Assessment
**(Special Individual Assessment)**

The College will evaluate for credit various types of learning acquired outside the usual classroom environment. Particular criteria for awarding credit may be applied by an academic department. Approval of credit is the responsibility of the appropriate department. Students must clearly identify what has been learned. Contact the divisional dean for additional information. (Fees, page 14.)

### Special Assessment of Experiential Learning

The College will evaluate for credit various **types of learning** acquired through participation **in learning** experiences, or training provided by business, industry, unions, professional societies, governmental agencies or the military. Particular criteria for awarding credit may be applied by an academic department, and approval of credit is the responsibility of the department. Contact the divisional dean for additional information.

### Service Learning

Several courses offer students the option of a service-learning experience component. These courses respond to community needs, include cooperation with community partners, and provide opportunities for students to work in local community agencies. The service learning activity supplements classroom activity and includes an academic component.

Students will be required to devote a specific number of hours to the community agency. The time commitment varies by course and instructor, but it may be as little as 20 hours or as much as 36 hours over the course of the semester.

### Independent Study

The college offers two types of Independent Study.

1. *Guided Study:* is an opportunity for motivated students to take a regular college course independently, but under the guidance of an instructor. Students must seek faculty sponsorship for guided study and course requirements are part of a formal contract between the student and instructor. Authorization proceeds through instructor, chair and dean. Guided study, as an alternative to conventional, classroom-based coursework, is to be used only in exceptional circumstances and at the discretion of the sponsoring instructor. The guided study course will be approved and appear on the student's transcript under the rubric and title of the specific regular course.
2. *Advanced Study:* is an opportunity for able, highly motivated students to study a subject or topic in greater depth than is available through normal coursework. A formal contract defines the project, establishes reading and writing requirements, sets meeting schedules and stipulates assessment methods and measures. Authorization proceeds through instructor, chair, and dean. The advanced study course will be approved and appear on the student transcript as a "299" Independent Study under the appropriate department rubric. Students are limited to one "Advanced Study" course per semester.

### Honors Program

The Honors Program is designed for students whose academic ability and personal motivation are so high that existing college programs may not fully challenge them. It is open to qualified students from most departments of the College. Participants are challenged to expand their understanding of life and reality through specially designed honors courses in English, History and Social Sciences, as well as through courses in the major program, close contact with honors faculty, and involvement with other highly motivated students.

Benefits include an increased awareness of political, economic, and social issues, development of critical thinking skills, and preparation for creative leadership in the 21st century, as well as an Honors transcript designation, an important asset in the competition for placement at selective four-year institutions.

To apply, students who believe they meet the qualifications below may obtain an application from Professor Greta Wingate, Program Director, Honors Program, Broome Community College, Binghamton, New York 13902.

#### Honors Program Requirements – High School Seniors

1. GPA of at least 3.2 (80 average).
2. SAT combined score of 1,050 or above with no subscore below 450.
   *OR*
   ACT composite score of 24 or higher with Math and English subscores of at least 21.
3. Two letters of recommendation:
   One from a teacher.
   One from a non-scholastic source such as an employer, club advisor, coach, or volunteer supervisor.
4. Students from New York: Regents Diploma.

#### Honors Program Requirements – Non-Traditional or Transfer Students

Because BCC has a large number of persons enrolled who do not come directly from high school, we want to make it possible for them to participate in the Honors Program.

Eligible students include:

- Full-time students who have completed one semester at Broome with a 3.5 GPA.
- Part-time students enrolled in a minimum of a 6 hour load per semester having accumulated 12 hours of credits with a 3.5 GPA.
- Transfer students having either of the above.

#### College-on-the-Weekend

College-on-the-Weekend is one way Broome Community College has responded to the needs of a growing number of non-traditional students. Many people wishing to continue their education cannot find the time during the week. Even night classes pose a problem for working parents raising families.

Students can earn a degree, part-time, attending classes every third weekend — six weekends each semester, taking one, two, or three classes per term and earning an Associate's Degree in as little as 2-1/2 years. Weekend students may start the program at the beginning of any semester.

*ALTERNATIVE LEARNING continued*

Students can take one, two, or three courses and progress at their own pace, and/or can combine College-on-the Weekend with day or evening courses at BCC to move along more rapidly.

Currently, BCC College-on-the-Weekend students can earn an Associate in Applied Science degree in Business with an emphasis in Human Resource Management or Marketing, or an Associate of Applied Science Degree in Accounting.

Various courses will be scheduled each semester to ensure that students will be able to take all necessary courses during the fall, spring, or summer terms. Students with business courses from other colleges should call about credit transfer. For more information call the Business Division 607 778-5008.

**Weekend Services**

BCC student services available to College-on-the-Weekend students:

- Financial Aid
- Lab Proctors
- Learning Assistance Center
- Study Areas
- Library Services
- Lounge
- Computers
- Advisors

**Senior Audits**

Any citizen of New York State who is 60 years of age or more may "audit" courses at Broome Community College without charge, as long as there is space available. In this context, the word "audit" means these students take the course by attending classes and being exposed to all the work given in class and assigned in the text. They do not have to do the homework or take the examinations, however, and they receive no letter grade or college credit.

**The Online Academy for Distance Learning**

The Online Academy at Broome Community College offers a number of distance learning courses each semester that are presented over the Internet through the SUNY Learning Network (SLN) and WebCT platforms. The instructor and students are connected to each other through a computer network. Using the Internet, students receive instruction, submit assignments, discuss issues, ask questions of fellow students and their instructors, work on group assignments, and actively participate in academic experiences; all from their home, office, or from any place they have access to the Internet. Classmates may be from the local community or may live anywhere on the globe. Students may participate any time, anywhere they have an appropriate computer with access to the Internet. There is no specific time that students have to be online, however the courses are not self-paced. There are class activities that students participate in each week.

Online courses meet the same rigor, standards, and learning outcomes that our traditional courses offer. They are taught by the same faculty that teach the course on campus and provide a high level of instruction and personal attention from the instructor.

In some majors, by careful selection of courses, it is possible for students to complete a substantial part of their degree requirements online.

The Online Academy web site at **http://sunybroome.edu/~online** provides up to date information on available courses and answers many frequently asked questions. For more information contact the Registrar's Office at 607-778-5027, the Counseling, Career Development & Advising Services at 607-778-5210, or consult with the department chair.

## Overseas Study Program

**Semester Aboard Programs**

BCC provides formal, structured programs lasting for a semester or a year, in Australia, England, France, Spain, Italy, Korea, Ecuador, Greece, Ireland, Portugal, Sweden, Dominican Republic, Mexico, China, Germany, and Switzerland. Students study a full semester program (usually 15 to 18 credits) that is arranged prior to their departure at affiliated schools, institutions, colleges, or universities abroad.

The subject areas range from liberal arts courses to specialized programs such as criminal justice, international business, and languages. Costs of these programs vary greatly, with emphasis on high quality programs at public institutions. The costs approximate those at U.S. public colleges. For 2002-03, the cost of a full semester in the popular program in England was about $5,800. This includes room and board, all tuition costs, and many extras.

Many BCC students will find their academic and personal lives enriched through a cultural experience difficult to match in a conventional two-year course of study in this country.

Students are able to use their financial aid packages for overseas study. A few special scholarships are also available. Over 200 students a year participate in the BCC Study Abroad programs.

**Admission to Programs**

Admission to the College does not automatically ensure admission to BCC programs overseas; separate application must be made. Students will be evaluated on their academic ability, motivation, maturity, and potential adaptability to a foreign culture. In addition to BCC approval, interviews with personnel from affiliate consortium institutions may be required. All programs are available to students from any college or the general public. Prior knowledge of a foreign language is not necessary.

**January and Summer Short Programs**

During each academic year BCC conducts short-term programs in January and in the summer months. A list of the January offerings is usually available by November.

The summer programs vary in length from two weeks to one month. Recent offerings have included Italian Culture and Language, and Field Ecology in Australia.

During the summer, there are special month-long programs in Italy, France and Spain. The cost of these programs was $2,999 each for 2002 but some students are able to qualify for scholarships. A full list of courses being offered during the summer is usually available in March.

**International Students**
**(See page 10.)**

**Credits, Transcripts, and Tuition For Study Abroad, Semester, Intersession and Summer Session**

Students register at BCC and pay the appropriate tuition, which in some cases covers the instructional cost abroad. Students are monitored through consortium offices at the college they attend. Upon the successful completion of the formal program or after fulfillment of the contract, students will receive a BCC transcript reflecting the grades achieved or the course equivalents for the work done through the contract, greatly facilitating transfer of credits to other American institutions.

Full-time students registering for courses that are scheduled other than in the Fall or Spring semesters will be charged at the part-time tuition rate. Sessions other than fall and spring semesters will be called Summer Session and Intersession.

The usual refund policy is not in effect for students taking courses in the Intersession and summer. Refund policies in semester length programs are determined by the receiving foreign institutions.

Grades received for all courses taken from the beginning of the Fall Semester through the end of that semester will be considered first semester grades. Grades received for all courses taken from the end of the first semester through the end of the second semester (even if taken in January or abroad) will be recorded as second semester grades.

Summer Session is treated like a third semester. The regular college grading system is used for all programs. All credits earned are Broome Community College credits, which allows students to use their financial aid packages for semester length programs.

Students may earn up to 18 credits per semester, leading to an associate's degree. Credits for Intersession/short-term programs range from one to six, depending on the time spent abroad, and the instruction offered in the program.

An Overseas Study bulletin board is maintained in the first floor lobby of Titchener Hall.

For additional details about any of the above programs, students should contact the International Studies Program Office at Broome Community College in M222 or T211 (Phone 778-5087).

## Baccalaureate Transfer

Broome Community College graduates have successfully transferred to a wide array of baccalaureate degree granting higher education institutions. These include both private and public colleges and universities in and out of New York State. Some of these are listed below.

**In-State Public Institutions**

**State University Centers at:**

Albany
Binghamton
Buffalo
Purchase
Stony Brook

**SUNY Colleges**

**State University Colleges at:**

Brockport
Buffalo
Cortland
Fashion Institute of Technology
Fredonia
Geneseo
New Paltz
Oneonta
Oswego
Plattsburgh
Potsdam
SUNY College of Agricultural & Life Sciences (Cornell)
SUNY College of Environmental Science & Forestry
SUNY College of Human Ecology (Cornell)
SUNY Upstate Medical University
SUNY Institute of Technology Utica/Rome

**In-State Private Institutions**

Clarkson University
College of St. Rose
Cornell University
Culinary Institute of America
Elmira College
Ithaca College
LeMoyne College
Marist College
Mercy College
New School for Social Research
Niagara University
Pratt Institute
Rochester Institute of Technology
St. Bonaventure University
St. John Fisher University of Rochester
Syracuse University
University of Rochester

**Out-of-State Institutions**

American University (DC)
Anatolia College (Greece)
Arizona State University
Art Institute of Pittsburgh (PA)
Bloomsburg University (PA)
Coastal Carolina Universary (SC)
College of William & Mary (VA)
East Stroudsburgh University (PA)
Fairleigh Dickinson University (NJ)
Fayetteville State University (NC)
Florida Atlantic University
Franciscan University of Steubenville (OH)
Gallaudet University (DC)
Indiana University
Mansfield University (PA)
Marymount College (VA)
Marywood College (PA)
Massachusetts College of Pharmacy
National College of Chiropractic (IL)
North Carolina State University
Northeastern University (MA)
Northern Arizona University
Oklahoma State University
Pennsylvania State University
Rutgers State University (NJ)
Sam Houston University (TX)
San Jose State University (CA)
University of Maryland
University of Nevada
University of North Carolina
University of Pittsburgh (PA)
University of Vermont
University of Texas
Virginia Tech
Wilkes University (PA)
York College of Pennsylvania

## Special Transfer Programs

### Guaranteed SUNY Transfer

Students who graduate from Broome Community College with Associate in Arts or Associate in Science degrees are guaranteed admission, at the third-year level, to a four-year college of the State University of New York. This guarantee has certain limitations and details are in the ACCESS Center.

Broome Community College has special articulation agreements with many two-year, upper division, and four-year colleges. The institutions listed here have transfer arrangements with BCC which allow BCC graduates to continue their education toward their baccalaureate degrees. For more information, contact the ACCESS Center.

**Bentley College**
Accounting, Computer Information Systems, Economics, Finance, Law, Management, Marketing, Quantitative Analysis

**Binghamton University**
School of Education and Human Development

Watson School of Engineering

Harpur College
School of Nursing

**Clarkson University**
School of Management

**College of St. Rose**
All AA, AS Degrees

**Cornell University (College of Human Ecology)**
Human Development and Family Studies

Interior Design

**Fairleigh Dickinson University**
AAS Degree in Civil, Electrical, Mechanical Engineering Technology

**LeMoyne College**
Any baccalaureate degree program with AA or AS in Liberal Arts and Related Careers, Business Administration, Engineering Science

**Marist College**
Parallel programs in Business (Marketing, Management) Accounting, Engineering Technology, (Civil, Electrical, Industrial and Mechanical)

**Rochester Institute of Technology**
AA, AS, AAS Degrees

**St. John Fisher College**
AA, AS degree programs, Liberal Arts and Related Careers, Business Administration, Engineering Science

**SUNY College of Technology at Alfred**
AAS in Electrical Engineering Technology, Mechanical Engineering Technology, Civil Engineering Technology

BS in Mechanical Electrical Engineering Technology

**SUNY College at Brockport**
Nursing, Business Administration, Criminal Justice, Liberal Arts and Related Careers and degrees will be accepted in Brockport's Recreation and Leisure program and Social Work program

**SUNY College at Cortland**
Teacher Education: Birth through Grade 6, Computer Science

**SUNY College of Environmental Science and Forestry**
Biological Sciences
Chemistry
Construction Option (Civil)
Landscape Architecture
Forest Engineering
Paper Science and Engineering
Wood Products

**SUNY College at Fredonia**
AA degree into Business Administration or Liberal Arts and Related Careers or Radio and Television

AS degree into Math, Physics, Music Education

**SUNY College at Oneonta**
AAS in Accounting, Marketing, Management, Data Processing, and AS in Computer Science

**SUNY College at Oswego**
Business Administration

AAS in Vocational - Technical Education

Liberal Arts

**SUNY College at Plattsburgh**
Any Associate's Degree that leads to a baccalaureate program

**SUNY College at Potsdam**
Any Associate's Degree that leads to a baccalaureate program

**SUNY College at Purchase**
AA, AS degree programs in Liberal Arts and Related Careers

**SUNY College of Technology (Utica)**
AAS in Business, Electrical, Civil and Mechanical Engineering Technology, Industrial Technology, Nursing

AS in Computer Science, Engineering Science, Liberal Arts and Related Careers

AA in Liberal Arts and Related Careers

AS Human Services

**Syracuse University**
Schools of Management, Engineering Science, and Nursing

**Trinity College (Vermont)**
AA, AS, AAS degrees, concentrates on Liberal Arts and Related Careers, Sciences, Business Administration, Engineering Science

**SUNY Upstate Medical University**
Cytotechnology, Medical Technology, Physical Therapy, Cardiovascular Perfusion, Medical Imaging Sciences, Radiation Therapy, Respiratory Care

**Utica College of Syracuse University**
AA, AS graduates in following concentrations - Liberal Arts and Related Careers, Business Administration, Engineering Science

**Waynesburg College**
AS Degree graduates accepted, transfer credits determined on individual basis

**West Virginia University**
Dental Hygiene

**Wilkes University**
Accounting, Business Administration, Computer Science, Engineering Science, Liberal Arts and Related Careers, Nursing

**Roger Williams College**
AS degree graduates accepted. Transfer credit determined on individual basis

### Cooperative Programs

#### Nursing, SUNY Brockport

Broome Community College has a Three-Plus-One Program with the Department of Nursing at SUNY-Brockport. After completion of the AAS degree in Nursing at Broome Community College, students take additional courses at Broome Community College during the third year. After successfully completing entrance exams, the student is admitted to SUNY Brockport for completion of the Bachelor of Science in Nursing degree.

#### Keystone Junior College

BCC students may also cross-register at Keystone Junior College in LaPlume, PA, for one course each semester. The courses for which they cross-register must be ones that are not available at Broome Community College, and they can take them without paying additional tuition. Additional information is available in the Registrar's Office (Student Services Building, Room 105).

#### Engineering Science

The Engineering Science Department has joint admissions agreements with Binghamton University's Watson School and with Buffalo University's School of Engineering. The department maintains specific articulation agreements with Cornell University, Clarkson University, Wilkes University and Tri-State University and a general articulation agreement with the Association of Engineering Colleges of New York State, all of which assure transfer as a junior to these institutions. Contact the Engineering Science Department for additional information.

#### Engineering, Binghamton University Transfer Agreement

All Broome Community College students who have graduated or will graduate with an AA or AS degree with a grade point average of at least 3.0 will be admitted, upon application, as matriculated students at Binghamton University as space permits. Those students graduating with the above degrees, but with a grade point average between 2.6 and 3.0, are usually admitted. Others, including those with an AAS degree, should contact the Binghamton University Office of Admissions. Admitted students will be granted junior-year standing upon presentation of 56 or more transferable credits.

#### Environmental Science and Forestry Pre-Environmental Science and Forestry

This program is designed for those students who ultimately desire a B.S. degree in Environmental Science and Forestry (ESF), which is an upper division/graduate center.

After the first two years of study at Broome Community College, transfers to ESF may apply to a variety of programs at Syracuse which may include the *biological sciences* (botany and forest pathology, entomology, zoology, wildlife biology, silvics, pest management); *chemistry* (natural and synthetic polymers, biochemistry and natural products, environmental); *forest engineering, paper science and engineering; wood products engineering; and forestry* (resource management, forest resource science, management science, environmental forestry, applied resource management). The program in *landscape architecture* leads to a B.S. degree in environmental studies and, after one additional year, a Bachelor of Landscape Architecture degree.

Persons planning to transfer should follow the program requirements in consultation with BCC's Pre-Environmental Science and Forestry campus advisor for selection of electives which may vary according to the curriculum at ESF.

Successful graduates of Broome Community College's Pre-Environmental Science and Forestry Program generally gain admission to the SUNY College of Environmental Science and Forestry with full junior class status.

Contact the ACCESS Center, Student Services Building, Room 210.

### One-Plus-One Programs

Broome Community College has One-Plus-One programs with other two-year colleges to enable a student to attend BCC for one year and then transfer to the other college for the second year for the Associate in Applied Science degree. This program permits students to begin studying at BCC for a degree in a field not offered at this college. By taking the BCC courses that one needs for the particular degree involved, residents of Broome County can enjoy the advantage of living at home during one year of their college attendance. Students taking these One-Plus-One Programs are Liberal Arts and Human Services students at Broome Community College because most of the courses they take at BCC are Liberal Arts and Human Services courses.

Check with the Liberal Arts and Human Services Office for more information about these programs.

## Part-Time Studies

### General Information

Anyone in the community may enroll as a part-time student; BCC attracts a large number each year. Part-time enrollment accounts for almost 50% of the student body. These are mostly "non-traditional" students, men and women who also work full-time. The College has a strong commitment to serving the part-time student.

Part-time students are those who take fewer than 12 credits per semester, usually one or two courses. At BCC, part-time students can:

- enroll in credit courses, or non-credit mini courses.
- take day, evening, or weekend courses.
- attend classes in the fall, spring, or summer semester.
- earn a degree or not, as they see fit. Certificate programs are available.
- apply for financial aid if carrying 6 or more credits.
- receive academic advising and personal counseling.
- borrow books from the College library.
- receive Veterans' benefits.
- transfer credits to BCC earned at another college.
- participate in the College-on-the-Weekend Program.

### Admissions

Although part-time students can take courses without being admitted, it is generally in the student's best interest to seek admission early in their studies. This will ensure more accurate and comprehensive advisement. Also, financial aid programs require formal admission to a degree program.

### Placement Test

Part-time students are required to demonstrate basic skills competency for college level work. All matriculated students — those who are officially enrolled in a degree program — are required to take placement tests in reading, writing, and mathematics. The scores from the tests are used together with high school records to place students in courses where they will have the best chance to succeed. Contact the Admissions Office (778-5001) or your advisor for testing information.

### Advisement

Academic advisement and counseling are available for all Broome Community College part-time and evening students through the ACCESS Center, Student Services Bldg., Room 210.

# Student Services

## Library/Learning Resources Center (LRC)

The Cecil C. Tyrrell Learning Resources Center was constructed in 1967-68 and named after the College's founding president. The building is an attractive, three-story structure, which houses the Library, the Learning Assistance Center, Teaching Resources Center, as well as offices and classrooms.

The Library provides the resources and services to meet the informational and instructional needs of BCC students, faculty, and the broader college community. Its primary functions are to support and supplement the academic programs of the College, increase information literacy, and to provide a center for serious study, research, and learning.

The Library integrates a variety of print, electronic, and non-print materials with the necessary services and equipment to enhance their use. Our electronic databases provide access to approximately 10,000 full text articles that students can access through the Internet at any time. The print collections consist of nearly 67,000 books and 300 periodical titles. The non-print collection includes videos, CD's, microfiche and other audiovisual formats.

Access to our collections is provided through our Online Public Access Catalog. To ensure access to books and magazine articles not owned by the College, the Library participates in various local, regional, state, and national reciprocal access and borrowing agreements. Library staff can request specific books or articles from other libraries through interlibrary loan. In addition, the Library maintains listings of other area libraries' periodical holdings where students can have direct access to their collections.

Library facilities include a student computer lab, Library instruction classroom, public access electronic database stations, web-based public access catalog, individual study carrels, small group study rooms and individual audiovisual viewing stations.

A staff of professional, technical, and clerical specialists offers a broad range of services including lending of materials, information services, assistance with research techniques, and instruction in the use of materials and equipment.

Most materials may be borrowed for use outside the Library, although restrictions are placed on reference and reserve works. The basic loan period for books is twenty-one days, and for videocassettes, seven days.

The BCC ID card, issued by Student Affairs, serves as a Library card. The card must be brought to the Library to be activated. Failure to return borrowed materials promptly upon notice can result in withholding of grades, transcripts, and other services as well as collection fees. The borrower is responsible for all materials charged out on his/her card.

The Library is open for service during the following hours:

**Fall and Spring Semesters**

Monday-Thursday .....7:30 a.m. to 10 p.m.
Friday .....7:30 a.m. to 5 p.m.
Saturday.....12 noon to 5 p.m.
Sunday .....4:00 p.m. to 8 p.m.

**Summer Session**

Monday-Thursday .....7:30 a.m. to 10 p.m.
Friday .....7:30 a.m. to 5 p.m.
Sunday .....4:00 p.m. to 8 p.m.

**Holiday and Intersession**

As posted

The Library is closed on all the days that the College is officially closed.

## Student Health Services

Student Health Services is located in the Science Building, Room 102, and is open 8:30 a.m. to 5:00 p.m., Monday through Friday. All records are confidential, and information will be released only with the written authorization of the student.

The professional staff includes a part-time physician and clinic nurse, and a full-time nurse practitioner.

**Services:**

- Limited treatment for illnesses and injuries
- Limited medical emergency care
- Blood pressure screening
- Pregnancy tests
- Hepatitis B Vaccine ($165 charge)
- Measles, Mumps and Rubella immunizations (MMR - $40 charge)
- TB screening ($5 charge)
- Tetanus immunization ($5 charge)
- Contraceptive information
- Healthy lifestyle information
- Tests for strep throat

## Child Care

For many students, a major concern is finding a safe place for their children during class time. The Faculty-Student Association helps to meet that need by operating a licensed child care service known as The B.C. Center.

The purpose of the service is to provide quality care in an educational, instructive, and warm environment. The staff is genuinely interested in the emotional, intellectual and physical growth of each child.

Space is limited, and registrations are required. For additional information, call 778-KIDS (778-5437).

## Student Support Services

Students with disabilities are entitled to appropriate accommodations based on their individual needs and disability documentation. The Student Support Services Program coordinates accommodations and supportive services for students with disabilities. Accommodations such as interpreters, notetakers, testing accommodations, class accessibility and scheduling, adaptive educational equipment, books on tape, and other appropriate accommodations for educational access are arranged with the student based on individual disability documentation.

Broome Community College is committed to meeting the accommodative and support needs of students with disabilities. It must be realized though, that arranging accommodations requires advance planning. The College urges any student who has need of educational accommodations to give the Student Support Services Program as much advance notice as possible in order to ensure provision of quality support services.

To avoid duplication of services, the College urges any student with a disability to attempt enrollment with appropriate federal and state agencies (i.e. VESID, the Commission for the Blind, Veterans' Education Assistance Agency). Student Support Services staff will assist any student in applying to state and federal agencies.

A booklet describing supportive services is available from the Student Support Services office. This booklet is also available in alternative format.

### Support Services for Students with Disabilities

With an open door admissions policy, BCC attracts many students with varied needs. The Student Support Services Program, a U.S. Department of Education grant program, provides assistance to students who have experienced difficulty in achieving academic success. The program is aligned under the Academic Affairs Division, and works closely with the Learning Assistance Center.

The Student Support Services Program provides a variety of supportive services to students who qualify for the program. Students may qualify under educational, economic, first generation, or disability criteria. Program supportive services include academic advisement, tutorial assistance, accommodations for students with disabilities, a peer mentor program, transfer information, and other supportive services. The office is located in the Cecil C. Tyrrell Learning Resources Center, and is open from 8 a.m. to 5 p.m. Phone 607 778-5150, 607 778-5234 (TDD).

### Deaf/Hard-of-Hearing Program

The Deaf/Hard-of-Hearing program offers support services to students with hearing loss. The Coordinator of Interpreting Services works closely with Student Support Services to provide students a wide range of accommodations to ensure total accessibility. Qualified interpreters are scheduled for classes, campus service, tutoring, and student activities. The Coordinator of Interpreting Services is available to assist students in accessing services needed to meet their academic goals.

## Campus Shop

Students may purchase required course and general supplies, imprinted sportswear, general books, study aids, newspapers, gifts and other merchandise from the Campus Shop.

Located in the Student Center, the shop is open throughout each semester for students' convenience.

The Campus Shop is operated by the Faculty-Student Association of Broome Community College, Inc.

## Bookstore

Students may purchase their course books from the Bookstore which is located in the Campus Services Building.

The store opens one week prior to the start of classes for advance sales, and students are encouraged to take advantage of the opportunity to purchase their books early.

The Bookstore is operated by the Faculty-Student Association of Broome Community College, Inc.

For additional information, please view the BCC Bookstore web site at http://www.sunybroome.edu/bookstore.html

## Counseling, Career Development, and Advising Services

Professional advisors and counselors provide many services for students, whether they are enrolled full-time or part-time, day or evening. Specialized counseling is also available for the international, disabled, career undecided, and academically dismissed students. All students can meet with counselors in a confidential, helpful, and informal atmosphere, as they seek to develop their potential, form realistic goals, and understand themselves emotionally and intellectually.

Counseling, career development and advising services are located in the ACCESS Center, second floor of the Student Services Building. Students should become acquainted with the Center by stopping in at their convenience or calling either 778-5210 or 778-5421 for an appointment. Special brochures are available at the Center giving details about the services.

### Academic Advising and Counseling

Academic advisors and counselors assist students in channeling their academic efforts into the proper perspective by helping them link their studies to personal and career goals and through aiding students when they are having difficulty in the classroom. Advisors discuss any concerns related to academic performance and progress. Services include academic orientation, selecting a course of study, and building a course schedule. Appointments are available and walk-ins are welcome.

### Personal Counseling

Counselors provide assistance to students who are experiencing social, personal, and family concerns. They are available to help the student facing these issues in a safe and confidential setting. Without resolution of problems, student performance in their studies often suffers and in many cases leads to the student being dismissed from the college due to poor grades.

### Career and Life Planning

Counselors assist students in exploring and establishing specific career and life goals. The process counselors use is a proven step-by-step approach to helping people identify and pursue their most fulfilling options.

### LAUNCH Program: Liberal Arts Undecided: Career Horizons (Associate in Arts)

LAUNCH is a specifically designed Associate in Arts program for students needing career guidance and additional time to select an academic major. Enrolled students receive moderate intervention from their advisors, who also teach the required SAC 250 course. This curriculum also involves cross-curricular programming as advised by the students' advisors. Here students are encouraged to take one approved elective from Liberal Arts or non-Liberal Arts Divisions consistent with their career interests. During their first year, students are placed in the highest level of math, English and science they are qualified to take, since all students must meet General Education requirements. When students decide on academic majors consistent with their decided career goals, they will take necessary steps to change their majors, unless, of course, the prescribed academic paths begin in Liberal Arts.

### Transfer Counseling and Assistance

Broome Community College has an excellent reputation for preparing students for study at four-year colleges and universities. Counselors assist students who are interested in continuing their education after their study at Broome by helping them identify schools that match their educational needs, interests, and abilities, and gaining important information about the schools which they are considering.

Additionally, counselors help students wishing to transfer with understanding the transfer procedures and steps that are necessary for successful transfer. Counselors and the Admissions Office work together to present the annual *Transfer Information Day* on campus, when representatives of four-year colleges and universities answer student questions about their institutions and give them specific information to help with their final selection of an upper-division school.

### Counseling for Disabled Students

Students with disabilities may receive counseling by a counselor specifically assigned to this student population. The counselor is located in Student Services, which is completely accessible. The Center's TTY phone number is 607 778-5210.

### Human Development Courses

The Center offers credit-bearing courses which provide students with an opportunity to examine their values, attitudes, beliefs, and abilities. The courses also offer an opportunity to learn how these factors affect the quality of life and relationships with others. In addition, the students examine the challenges and problems of society in relation to their development.

### Special Workshops and Seminars

The Center offers a variety of workshops and seminars throughout the college year. Those that have been offered cover such topics as relaxation techniques, career exploration, cognitive style mapping, returning to college, assertiveness training, and help for eating disorders and substance abuse.

### Testing

In conjunction with career and life planning, personal counseling, and academic counseling, the ACCESS Center offers students the opportunity to engage in a testing program. When appropriate, it can be arranged for a student to take a variety of tests including personality and interest inventories. Cognitive style mapping is also available to help students better understand their individual learning preferences. Tests can help students develop self awareness and improve their decision-making ability. The ACCESS Center also administers the ACT test and other professional career tests and licensing examinations.

### International Student Advisor

The ACCESS Center provides an advisor to assist students from other countries in all areas of student life while at the College. The advisor also assists the international students in finding housing since the College has no dormitories.

### Placement Services

Getting a job requires an understanding of how to contact employers and what job hunting techniques provide the best employment success. BCC's Placement Services not only helps students locate positions, but offers assistance in resume writing, networking, interviewing techniques, and all other job search related issues.

Additional services include posting part-time and seasonal jobs, access to the state and national job market via Internet, publications specifically related to employment techniques, and use of word processors and printers for resume and cover letter composition.

During the spring semester of each year, representatives of business, industry, and other organizations visit the campus to interview potential graduates for employment purposes. Augmenting the one-on-one recruiting interview is the opportunity to make contact with many employers at the spring job fair held each March. Students wishing information regarding these recruitment programs or any other placement services should call 607 778-5205, stop by the ACCESS Center, or visit Placement's web site at www.sunybroome.edu/~placement.

(see placement statistics on page 35)

### Educational Opportunity Program (EOP)

The Educational Opportunity Program is designed for New York State residents who fall within specific academic and financial guidelines. EOP provides economic aid, remedial, and developmental assistance, with the amount of financial aid based on need.

To be eligible for EOP, students must provide appropriate income information as verification and apply before or during the 1st semester of college. (778-5220).

## Placement Statistics: 2001 Graduates

### % Found Jobs or Transferred

- 87% of the 2001 graduates either found employment or transferred to four-year colleges, thus enabling BCC to fulfill its two major missions of preparing graduates for immediate employment or transfer to four-year colleges.
- 42% of the graduates went to work.
- 45% transferred to two and four-year colleges or other technical programs.[1]
- 9% were unemployed at the time of the survey.
- 3% were unavailable for work.
- Starting salaries of those who went to work average $27,000 a year and ranged from $10,000 up to $42,000. About 45% reported salary information.
- 954 graduates were in the Class of 2001 at Broome Community College, and 651 of them responded to the survey. All statistics here are based on that 68% response.

### Where They Went To Work

- 74.4% of those who went to work found jobs in Broome county, with an additional 15.7% working elsewhere in the Southern Tier. In additional, 3.3% got jobs elsewhere in New York State, and another 6.6% went outside of the state.

### Where They Transferred To

- 79% of those who are continuing their higher education transferred to colleges in the State University of New York (SUNY) system.
- 12% to private colleges in New York State.
- 9% out-of-state colleges and universities.

### Leading Employers (In Order)

1. Hospitals, nursing homes, clinics, rehabilitation centers and related medical
2. Day care, education, and nonprofit organizations
3. Industry, large
4. Dentist, dental surgeon, and related dental
5. Retail store
6. Industry, small to medium
7. Financial Institutions
8. Restaurant, fast food
9. Business firm other than retail (e.g. computer services)
10. Civil Service

*It should be noted that many BCC graduates obtain their degrees while they are employed. The above lists are not intended to suggest that all of those employed were new hires.*

[1]Transfer data does not substitute for the requirements of the Student Right to Know Act reflected on page 36 of this catalog.

### Placement by Academic Division

The Academic Areas

- *Business & Office Technologies:* 255 graduates, 40% employed, 4% unavailable for work, 41% transferred, 14% unemployed. Salary: $24,000 average. $14,000 to $42,000 range.
- *Engineering, Technology & Computer Studies:* 123 graduates, 53% employed, 2% unavailable for work, 40% transferred, 5% unemployed. Salary: $29,800 average. $19,000 to $40,000 range.
- *Health Sciences:* 154 graduates, 78% employed, 2% unavailable for work, 4% transferred, 17% unemployed. Salary: $31,000 average. $17,000 to $37,000 range.
- *Liberal Arts & Related Careers:* 422 graduates, 26% employed, 4% unavailable for work, 65% transferred, 5% unemployed. Salary: $19,000 average. $10,000 to $25,000 range.

### Placement by Curriculum

The following is a summary of each curriculum of BCC's six academic areas in which there were graduates last year. Percentages are based on number of graduates responding, not total number.

#### Business and Office Technologies

- *Accounting, Banking, & Financial Services:* 26 graduates, 39% employed, 11% unavailable for work, 44% transferred, 0% unemployed. Salary: $26,000 average. $19,000 to $30,000 range.
- *Business Administration:* 58 graduates, 24% employed, 0% unavailable to work, 70% transferred, 5% unemployed. Salary: $27,000 average. $14,000 to $45,000 range.
- *Business Information Management (AAS):* 16 graduates, 10% employed, 30% unavailable for work, 20% transferred, 40% unemployed. Salary: NA
- *Health Services Administration (AS):* 4 graduates, 33.3% employed, 0% unavailable for work, 33.3% transferred, 33.3% unemployed. Salary: NA
- *Hotel Restaurant Management (AAS):* 10 graduates, 80% employed, 0% unavailable to work, 0% transferred, 20% unemployed. Salary: $26,900 average, $15,000 to $42,000 range.
- *International Business (AS):* 7 graduates, 25% employed, 0% unavailable, 75% transferred, 0% unemployed. Salary: NA
- *Office Administration (AAS):* 10 graduates, 70% employed, 0% unavailable for work, 10% transferred, 20% unemployed. Salary: $17,700 average, $16,000-$18,000 range.
- *Financial Services:* 9 graduates, 67% employed, 0% unavailable for work, 33% transferred, 0% unemployed. Salary: NA.
- *Management:* 4 graduates, 0% employed, 0% unavailable for work, 50% transferred, 50% unemployed. Salary: NA.
- *Marketing Management:* 73 graduates, 48% employed, 49% unavailable for work, 34% transferred, 14% unemployed. Salary: $24,500 average. $19,000 to $34,000 range.
- *Paralegal:* 18 graduates, 60% employed, 0% unavailable to work, 30% transferred, 10% unemployed. Salary: $23,900 average. $19,000 to $29,000 range.

#### Engineering, Technology, & Computer Studies

- *Civil Engineering Technology:* 14 graduates, 69% employed, 8% unavailable to work, 23% transferred, 0% unemployed. Salary: $31,000 average. $27,000 to $40,000 range.
- *Computer Information Systems:* 20 graduates, 73% employed, 0% unavailable to work, 14% transferred, 13% unemployed. Salary: $26,000 average. $19,000 to $26,000 range.
- *Computer Science:* 14 graduates, 17% employed, 0% unavailable to work, 83% transferred, 0% unemployed. Salary: NA.
- *Computer Technology:* 3 graduates, 50% employed, 0% unavailable to work, 50% transferred, 0% unemployed. Salary: NA.
- *Electrical Engineering Technology:* 12 graduates, 66% employed, 0% unavailable to work, 17% transferred, 17% unemployed. Salary: $36,900 average. $34,000 to $39,000 range.
- *Engineering Science:* 16 graduates, 0% employed, 0% unavailable to work, 100% transferred, 0% unemployed. Salary: NA.
- *Industrial Technology:* 9 graduates, 100% employed, 0% unavailable to work, 0% transferred, 0% unemployed. Salary: NA.
- *Mechanical Engineering Technology:* 9 graduates, 56% employed, 0% unavailable to work, 44% transferred, 0% unemployed. Salary: NA.
- *Telecommunications:* 18 graduates, 86% employed, 0% unavailable to work, 14% transferred, 0% unemployed. Salary: NA.

#### Health Sciences

- *Dental Hygiene:* 24 graduates, 83% employed, 4% unavailable to work, 0% transferred, 13% unemployed. Salary: $35,400 average. $35,000 to $37,000 range.
- *Emergency Medical Technician/Paramedic:* 5 graduates, 50% employed, 0% unavailable to work, 0% transferred, 50% unemployed. Salary: NA.

***Continued on page 36***

*Continued from page 35*

- *Health Information Technology:* 7 graduates, 50% employed, 0% unavailable to work, 17% transferred, 33% unemployed. Salary: NA
- *Medical Assistant:* 12 graduates, 80% employed, 0% unavailable to work, 0% transferred, 20% unemployed. Salary: $18,700 average. $17,000 to $20,000 range.
- *Medical Laboratory Technology:* 6 graduates, 67% employed, 0% unavailable to work, 0% transferred, 33% unemployed. Salary: $25,500 average. $23,000 to $26,000 range.
- *Nursing:* 52 graduates, 91% employed, 3% unavailable to work, 3% transferred, 3% unemployed. Salary: $33,000 average. $31,000 to $36,000 range.
- *Physical Therapist Assistant:* 19 graduates, 50% employed, 0% unavailable to work, 13% transferred, 37% unemployed. Salary: NA
- *Radiologic Technology:* 18 graduates, 10% employed, 0% unavailable to work, 0% transferred, 0% unemployed. Salary: $28,000 average. $27,000 to $32,000 range.

### Liberal Arts & Related Careers

- *Criminal Justice:* 37 graduates, 43% employed, 0% unavailable to work, 52% transferred, 5% unemployed. Salary: NA.
- *Early Childhood:* 17 graduates, 46% employed, 8% unavailable to work, 46% transferred, 0% unemployed. Salary: NA.
- *Fire Science:* 5 graduates, 0% employed, 0% unavailable to work, 67% transferred, 33% unemployed. Salary: NA.
- *Human Services:* 29 graduates, 50% employed, 49% unavailable to work, 42% transferred, 4% unemployed. Salary: NA.
- *Individual Studies (AS):* 17 graduates, 17% employed, 8% unavailable to work, 67% transferred, 8% unemployed. Salary: NA.
- *Liberal Arts (AA):* 180 graduates, 20% employed, 3% unavailable to work, 74% transferred, 3% unemployed. Salary: $21,000 average. $15,000 to $20,000 range.
- *Chemical Dependency Counseling (AS):* 4 graduates, 50% employed, 25% unavailable, 25% transferred, 0% unemployed. Salary: $24,000 average. $23,000 to $25,000 range.
- *Liberal Arts (AS) – Communications Media:* 34 graduates, 35% employed, 4% unavailable to work, 50% transferred, 11% unemployed. Salary: NA.
- *Liberal Arts (AS):* 12 graduates, 17% employed, 0% unavailable to work, 67% transferred, 16% unemployed. Salary: NA.
- *Liberal Arts General Studies:* 86 graduates, 17% employed, 3% unavailable to work, 75% transferred, 5% unemployed. Salary: NA.

## Student Right-To-Know Statement

The Federal Student Right-to-Know Act was enacted in 1991 and final regulations were published on December 1, 1995. This legislation requires any institution of postsecondary education receiving Title IV funds to disclose calculation and disclosure of graduation rates and transfer-out rates of students. The act also requires the following:

- Only first time, full-time degree/certificate seeking undergraduates are included in the calculation.
- Students are reported at the end of the period, which constitutes 150% of the time needed to complete a degree. The report would include those students starting in the cohort of fall 1996 and concludes with the ending date of August 31, 1999.
- Additional copies of this report are available in the Registrar's Office, Student Services Building, room 105.

The following report fulfills the Student Right-To-Know Act reporting requirements for graduation rate and transfer-out rate for BCC students.

### Student Right-To-Know

| **Fall 1996** | |
|---|---|
| Full Time /First Time | 954 |
| **Degree Graduates** | |
| By Aug 31, 1999 | 286 |
| AA Degree - 78 Graduates | |
| AAS Degree - 127 Graduates | |
| AS Degree - 81 Graduates | |
| **Graduation Rate** | 29.98 % |
| **Transfer Students** | |
| With a Degree | 142 |
| **Transfer Students** | |
| Without a Degree | 147 |
| **Total Transfer** | 289 |
| **Transfer Rate** | |
| Transferred Without a Degree | 15.41% |

### Top Transfer Schools

| | |
|---|---|
| SUNY Binghamton | 63 |
| SUNY College, Cortland | 38 |
| SUNY College Oneonta | 30 |
| SUNY College at Oswego | 13 |
| SUNY College, Brockport | 8 |
| Rochester Institute of Technology | 8 |
| SUNY College of Environmental Science | 7 |
| SUNY College of Technology @ Delhi | 6 |
| SUNY College, Geneseo | 5 |
| SUNY Institute of Tech at Utica-Rome | 5 |
| SUNY College, Buffalo | 5 |
| Ithaca College | 5 |
| SUNY Morrisville | 4 |
| Mansfield University | 4 |
| SUNY Albany | 4 |
| SUNY College Potsdam | 3 |
| SUNY Dutchess Community College | 3 |
| Culinary Institute of America | 3 |
| CUNY Borough of Manhattan | 3 |
| SUNY Tompkins Cortland Community College | 3 |
| Rensselaer Polytechnic Institute | 3 |
| Cornell University-Agriculture | 3 |
| Marywood University | 3 |
| Pennsylvania State University | 2 |
| SUNY Stony Brook | 2 |
| SUNY Cobleskill | 2 |

# Student Life

The principle of the Student Activities Program at BCC is that education is not restricted to scheduled classes. The program supplements and enhances the academic environment through co-curricular activities, as well as providing a chance to exercise social skills—important to life-long learning—which are not covered in the classroom. The program offers a variety of social, cultural, intellectual, and athletic experiences.

## Athletics

### Intercollegiate Sports

The Athletics department at Broome Community College serves as an integral part of the institution's total academic and student activities program. BCC is serious about athletics. The department strives to provide an environment in which the athlete can achieve maximum development physically and mentally, through a well-rounded schedule of intercollegiate competition in athletics.

BCC is one of 550 member schools of the National Junior College Athletic Association (NJCAA). It is also one of 30 members of the subdivision of NJCAA Region III. BCC also participates in the Mid-State Conference as well as the Junior College Hockey League.

For Intercollegiate competition, Broome Community College fields men's teams in eight varsity sports — basketball, baseball, cross-country, golf, ice hockey, soccer, lacrosse and tennis. For women BCC sponsors six varsity teams — basketball, cross-country, softball, volleyball, soccer, and tennis.

BCC athletic teams have a rich tradition of success in two-year college competition. Dick Baldwin, who formerly coached men's basketball at BCC for 40 years, set the all-time record of 879 victories by a BCC coach. The golf team has been a frequent participant in the national tournament. The men's basketball and tennis teams have won numerous Regional Championships and participated in Division III National Championships. The baseball, soccer, ice hockey, and Cross-country teams all have won regional and national recognition throughout the years.

The women's program has been equally successful in regional competition. The volleyball team has participated in the Regionals as well as the National Tournament. Cross-country and softball have sent representatives to both tournaments. The soccer and basketball programs have made great strides over the years and have contributed to the rich athletic tradition at BCC.

Cheerleading is also available for both men and women.

In order to participate in Intercollegiate Athletics, students are required to meet NJCAA rules and academic eligibility requirements. All prospective athletes should contact the Athletics Office in the Student Center West (778-5003) to obtain further information on athletic eligibility requirements.

The Federal Register Report on Athletics is available in the Athletics office upon request.

The Athletics Program is enhanced by its facilities: two large, fully-equipped gymnasiums, a weight room, fitness center, a dance/combative room, athletic trainer's room, a baseball field, soccer field, full size hockey rink, and six tennis courts. A softball complex of four fields is also available to the College.

### Intramurals

Physical activity is a vital part of an individual's life, regardless of physical capability. With this in mind, the Student and Community Affairs division and the Physical Education department coordinate an intramural program for all students enrolled at the College. Students are invited to participate in team sports such as Indoor Soccer, Basketball and Volleyball. For those interested in individual competition or "Play for Fun," sports such as tennis, golf, badminton, and bowling are also offered.

## Clubs, Societies, and Organizations

Involvement in campus clubs provides a chance to exercise skills important to lifelong learning which may or may not be covered in the classroom. Depending on the purpose, club activities may range from overseas travel to local charity works.

Many organizations on campus are part of national organizations, either as student chapters of professional societies, service organizations, or honor societies. Club activity varies from year to year depending on student interest with new clubs developing around new pursuits. Current clubs include:

A.S.E.C. – American Society for Civil Engineering Club
American Society for Engineering Education
ASQ – Student Branch
BCC Hornet
Bible Student/Jehovah's Witnesses
Black Student Union
Broome Educators of Children Association
Campus Bible Fellowship
Chemical Dependency Counseling Club
Chess Club
Communications Curriculum Club
Computer Club
Criminal Justice Student Association
Deaf Club
Dental Hygiene Association
Differently Abled Student Association
Ecology Club
Fine Art & Design
Health Information Technology Club
I.E.E.E. (Institute of Electrical and Electronic Engineers)
International Students Organization
Japanese Animation Club
LAMBDA Society
Latter Day Saint Student Association
Lively Arts Club
Medical Assistance Club
Medical Lab Technology Club
Music Association
Musicians Network
Muslim Student Organization
NYS Restaurant Association
Newman Association
PHI THETA KAPPA – Honors Society
Physical Therapy Club
Political Science Club
Radiologic Technology Club
Rosa Luxemburg Collective
Ski Extreme
Society of Manufacturing Engineers
Student Nurses Association
Students for Sensible Drug Policy
Women's Discussion Group
Women's Outdoor Club
Writing Club

### The Student Assembly

The Student Assembly is the students' voice on campus. Membership consists of five Executive Board members and 10 Senators. The SA works with the Student Activities Office on campus and community programs. SA members provide input to campus life issues through their participation in campus boards and committees, including College Council, Parking Appeals Board, and the Faculty-Student Association. Students serving in the SA have also gone on to serve with the New York State Student Assembly as Community College Representatives.

### Performing and Fine Arts

Student Life at BCC means a variety of activities and performances going on weekly. Music, theater, comedy, dance, poetry readings, and contests, as well as lectures, seminars, and discussions are offered during the Common Hour. Annual events, including Student Activities Day, Halloween Costume Contest, Annual Student Art Exhibition, and Spring Arts Festival, bring the campus to life.

Theatre/BCC offers productions throughout the year of classic and new plays in a broad range of theatrical styles. Students may participate in productions whether or not they are enrolled in formal course work.

The BCC Music Association, the BCC Jazz Ensemble, the BCC Flute Ensemble, and the College Choir hold concerts throughout the year, both informally during the Common Hour and in concert settings with Winter and Spring Concerts.

### Student Behavior

The following prohibitions pertaining to student conduct are considered essential to the educational mission and community life of the college. They apply to all situations—on or off campus—with college sponsorship.

A. Use, possession, and/or distribution of weapons, firecrackers, explosives and chemicals.

B. Use or possession of illegal or controlled drugs and alcohol.

C. Gambling.

D. Abusive and disorderly behavior.

E. Deliberate destruction and/or abuse and misuse of college property or facilities.

F. Theft from an individual organization or agency, and/or department of the college.

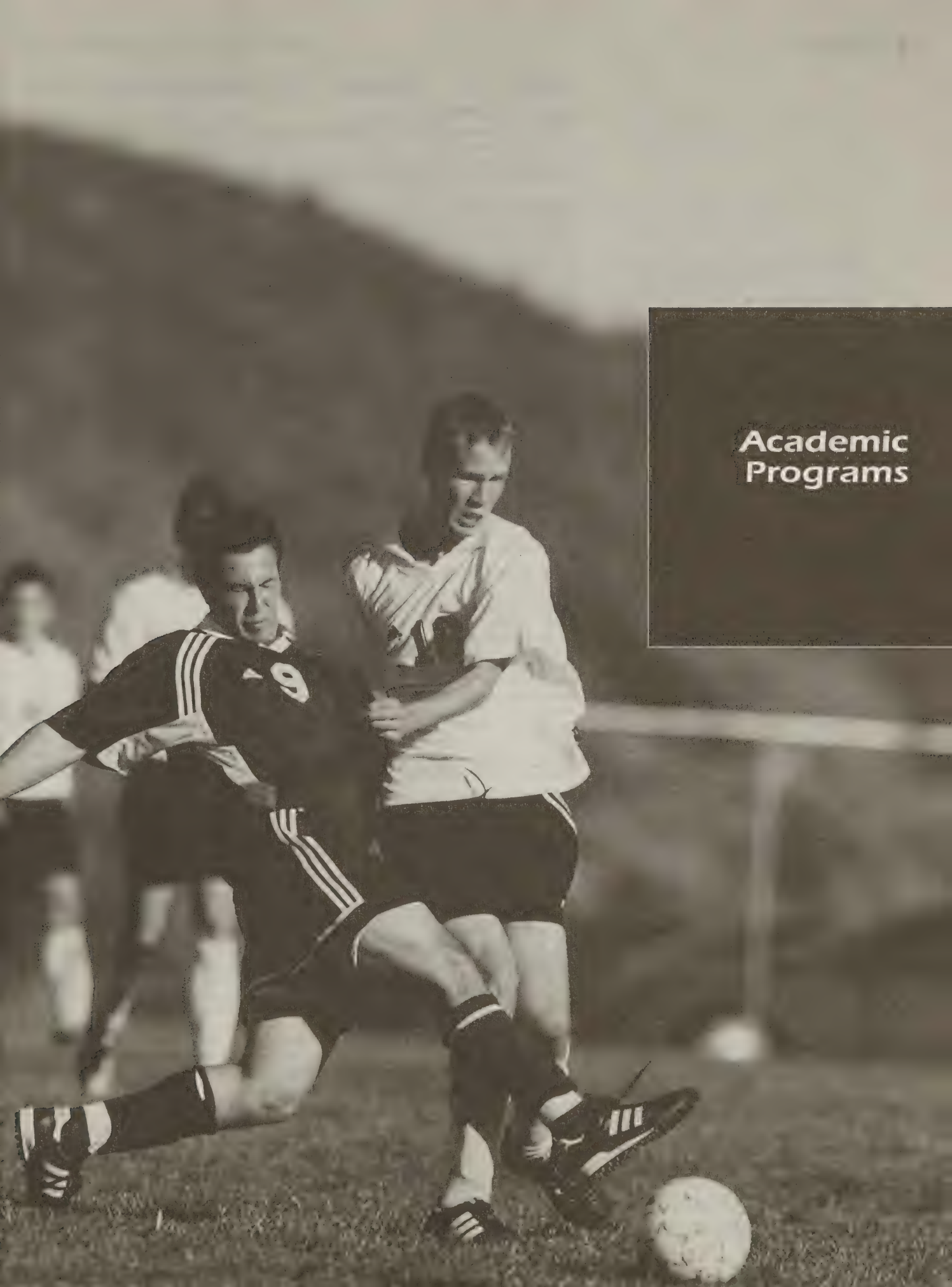
G. Assault and battery, threats of violence, and intimidation.

H. Fraud in any form, whether it be altering or changing college records, or cheating or plagiarism.

The above list of prohibitions is not a full listing of unacceptable behavior in a college community. It lists only the most intolerable acts. Other unacceptable behavior may also result in disciplinary action from the Vice President for Student and Community Affairs.

Academic dishonesty (such as cheating and plagiarism) or classroom behavior considered detrimental to the teaching-learning process will be addressed by the college's academic offices. A statement on student cheating appears on page 26.

Additional information about student behavior violation penalties appears in the Student Handbook distributed to all students at the start of the academic year.



# Academic Programs

# PART II - Table of Contents

**Degree and Certificate Programs**

The full displays of degree and certificate programs in this catalog are arranged in alphabetical order.

On this contents page, those programs are grouped by type with the page on which you will find the full requirement displays. Unless indicated as certificates, all are degree programs.


**Business Programs**

Accounting....41
Business Administration....42
Business Administration: International Business....43
Business Skills (Certificate)....47
Dietary Manager (Certificate)....57
Financial Services....63
Hotel/Restaurant Management....67
Management....89
Marketing/Management/Sales....90

**Engineering Technology and Computing Programs**

Civil Engineering Technology....49
Computer Information Systems....51
Computer Science....52
Computer Technology....53
Electrical Engineering Technology....59
Electrical Technology*....60
Engineering Science....62
Industrial Technology....70
Industrial Technology: (Certificate Programs)....71
Industrial Technology: Quality Assurance (AAS and Certificate)....72
Mechanical Engineering Technology....92
Telecommunications Technology....104

**Health Science Programs**

Dental Hygiene....56
Emergency Medical Technology - Paramedic....61
Health Information Technology....65
Health Sciences: Individual Studies....66
Medical Assistant....93
Medical Laboratory Technology....94
Medical Records Technology (see Health Information Technology)....65
Medical Transcription (Certificate)....95
Nursing....96
Nursing (Evening/Weekender Program)....97
Phlebotomy (Certificate)....101
Physical Therapist Assistant....102
Radiologic Technology....103

**Human and Public Service Programs**

Chemical Dependency Counseling....48
Criminal Justice-Corrections....54
Criminal Justice-Police....55
Early Childhood (AAS and Certificate)....58
Fire Protection Technology....64
Human Services....68
Gerontology....69

**Liberal Arts Programs**

Communication and Media Arts....50
Individual Studies....88
Liberal Arts and Sciences....73-74
Liberal Arts: General Studies....83-86
Art....83-84
Teacher Education....84-85
Music....85-86
Theater....86
Liberal Arts: (Model Programs)....75-82

**Office and Information Management Programs**

Business Information Management....44
Desktop Publishing (Certificate)....44
Office Administration....98
Office Technologies (Certificate)....44
Paralegal (AAS and Certificate)....100
Records Information Management (Certificate)....45
Website Development and Management (Certificate)....46


*Indicates programs pending NYS approval.

# Accounting

## Associate in Applied Science

The Accounting Program at Broome Community College is a sequence of courses in Accounting, Business, and Liberal Arts that leads to the Associate in Applied Science Degree (A.A.S.). The program is designed primarily to prepare the student for employment in the Accounting field immediately after graduation, although many students do transfer to four year schools.

The program is designed to be completed in two years by the full-time student. Students who wish to pursue part-time studies may do so. Schedules can be personalized to fit any need including some courses taught in the BCC College-on-the-Weekend program.

| FIRST YEAR | | | Hours/Week | | Credits/Semester |
|---|---|---|---|---|---|
| **Fall Semester** | | | Class | Lab | |
| BUS | 100 | Accounting I | 4 | 0 | 4 |
| BUS | 107 | Freshman Experience | 1 | 0 | 1 |
| BUS | 118 | Business Law I | 3 | 0 | 3 |
| BUS | 141 | Marketing | 3 | 0 | 3 |
| ENG | 110[4] | College Writing I | 3 | 0 | 3 |
| BUS | 112 | Quantitative Business Methods | 3 | 0 | 3 |
| | | | **17** | **0** | **17** |
| **Spring Semester** | | | | | |
| BUS | 101 | Accounting II | 4 | 0 | 4 |
| BUS | 120w | Business Law II | 3 | 0 | 3 |
| CST | 105 | Computer Applications | 2 | 2 | 3 |
| BUS | 115 | Business Statistics | 3 | 0 | 3 |
| MAT | 117[2] | Elementary Finite Math/Algebra | 3-4 | 0 | 3-4 |
| | | | **15-16** | **2** | **16-17** |
| **SECOND YEAR** | | | | | |
| **Fall Semester** | | | | | |
| BUS | 200[3] | Intermediate Accounting I | 4 | 0 | 4 |
| BUS | 210[3] | Managerial Accounting | 4 | 0 | 4 |
| — | — | Lab/Science Elective | 3 | 3 | 4 |
| ECO | 110w | Micro Economics | 3 | 0 | 3 |
| — | — | Advisor Approved General Education Course[5] | 3 | 0 | 3 |
| | | | **17** | **3** | **18** |
| **Spring Semester** | | | | | |
| BUS | 201[3] | Intermediate Accounting II | 4 | 0 | 4 |
| BUS | 205[3] | Cost Accounting | 4 | 0 | 4 |
| ENG | | Advisor Approved English Course | 3 | 0 | 3 |
| BUS | | Elective (pick one elective from group below) | 3-4 | 0-2 | 3-4 |
| — | — | Advisor Approved General Education Course[5] | 3 | 0 | 3 |
| | | | **17-18** | **0-2** | **17-18** |

**Total Credits: 68-70**

**Program supervised by:**

Jan Pitera
Office: Business Building, Room 108
Telephone: 607 778-5493
E-mail: pitera_j@sunybroome.edu

Patrick O'Bryan
Office: Business Building, Room B217
Telephone: 607 778-5175
E-mail: obryan_p@sunybroome.edu

**Curriculum Advisory Council: General Business**

Membership of the Business Department Advisory Council consists of representatives from area organizations. The Committee members are selected to serve on a rotating basis and are selected annually with some members remaining on the council for multiple terms.

**See also: Financial Services pg. 63**

**NOTE:** This program can also be taken on a part time or weekend basis. See page 31.

[2]Students planning to transfer are advised to take MAT 136 or higher.

Group B Electives: BUS 206, BUS 210, BUS 135, BUS 263, BUS 275, BUS 297.

[3]Take these courses in the semester (spring or fall) indicated. They are not offered in all semesters.

[4]or ENG 111, based on placement test.

[5]See Advisor: Non general education electives may be acceptable for students not transferring or transferring to non-SUNY colleges.

**Program supervised by:**

Jan Pitera
Office: Business Building, Room 108
Telephone: 607 778-5493
E-mail: pitera_j@sunybroome.edu

**Contact person:**

Patrick O'Bryan
Office: Business Building, Room B217
Telephone: 607 778-5175
E-mail: obryan_p@sunybroome.edu

**Curriculum Advisory Council: General Business**

Membership of the Business Department Advisory Council consists of representatives from area organizations. The Committee members are selected to serve on a rotating basis and are selected annually with some members remaining on the council for multiple terms.

**See also: Management pg. 89**

# Business Administration

## Associate in Science Transfer Program

The Business Administration program at Broome Community College is a sequence of courses in Business, Liberal Arts, and Math/Science that leads to the Associate in Science degree. The program is designed primarily to prepare the student for transfer to four-year schools although some students do seek employment immediately after graduation. The BCC Department of Business has transfer agreements with many universities which ensure graduates of full Junior status at the upper division school. Students completing the program also have the option of continuing studies at Broome Community College to receive a Bachelor's degree through the New York State Excelsior College.

The program is designed to be completed in two years by the full-time student. Students who wish to pursue part-time studies may do so. Schedules can be personalized to fit any need including the BCC College-on-the-Weekend program of study.

| FIRST YEAR | | | Hours/Week Class | Lab | Credits/Semester |
|---|---|---|---|---|---|
| **Fall Semester** | | | | | |
| BUS | 111 | Financial Accounting | 4 | 0 | 4 |
| BUS | 107 | Freshman Experience | 1 | 0 | 1 |
| BUS | 118 | Business Law I | 3 | 0 | 3 |
| BUS | 141 | Marketing | 3 | 0 | 3 |
| ENG | 110[4] | College Writing I | 3 | 0 | 3 |
| BUS | 112[1]/ | Quantitative Business Methods or | | | |
| BUS | 110 | Introduction to Business | 3 | 0 | 3 |
| | | | **17** | **0** | **17** |
| **Spring Semester** | | | | | |
| BUS | 210 | Managerial Accounting | 4 | 0 | 4 |
| BUS | 120w | Business Law II | 3 | 0 | 3 |
| BUS | 115 | Business Statistics | 3 | 0 | 3 |
| — | — | [2]Free Elective | 3 | 0 | 3 |
| CST | 105 | Computer Applications | 2 | 2 | 3 |
| | | | **15** | **2** | **16** |
| **SECOND YEAR** | | | | | |
| **Fall Semester** | | | | | |
| Advisor Approved General Education Course[2] | | | 3 | 0 | 3 |
| ECO | 110w | Micro Economics | 3 | 0 | 3 |
| Advisor Approved General Education Course[2] | | | 3 | 0 | 3 |
| — | — | [2]Lab Science Elective | 3 | 3 | 4 |
| PED | | Physical Education | 2 | 0 | 1 |
| — | — | [2]Free Elective | 3 | 0 | 3 |
| | | | **17** | **3** | **17** |
| **Spring Semester** | | | | | |
| ECO | 111 | Macro Economics | 3 | 0 | 3 |
| MAT | 136/ | College Algebra/ | | | |
| MAT | 146 | Introduction to Calculus | 3-4 | 0 | 3-4 |
| SOS | 116 | International Business | 3 | 3 | 3 |
| — | — | [3]Advisor Approved General Education Course[2] | 3 | 0-3 | 3 |
| ENG | | Advisor Approved ENG Course | 3 | 0 | 3 |
| | | | **15-16** | **0-6** | **15-16** |

**Total Credits: 65-66**

[1]Depending on Mathematics entrance testing scores and Math background, the student will take: MAT 090 and QBM or QBM or Introduction to Business.

[2]Be certain to consult advisor when selecting electives.

[3]See Advisor: Non general education electives may be acceptable for students not transferring or transferring to non-SUNY colleges.

[4]or ENG 111, based on placement test.

# Business Administration International Business

### Associate in Science Transfer Program

The Business Administration program with an emphasis in International Business is a sequence of courses in Business, Liberal Arts, and Math/Science that leads to the Associate in Science degree. The program is designed primarily to prepare the student for transfer to four-year schools although some students do seek employment immediately after graduation. The BCC Department of Business has transfer agreements with many universities which ensure graduates full Junior status at the upper division school. Students completing the International Business Emphasis can transfer to four-year colleges and receive a Bachelor's degree in International Business or other business areas.

The program is designed to be completed in two years by the full-time student. Students who wish to pursue part-time studies may do so. Schedules can be personalized to fit any need including the BCC College-on-the-Weekend program of study.

| FIRST YEAR | | | Hours/Week | | Credits/Semester |
|---|---|---|---|---|---|
| **Fall Semester** | | | Class | Lab | |
| BUS | 111 | Financial Accounting | 4 | 0 | 4 |
| BUS | 107 | Freshman Experience | 1 | 0 | 1 |
| BUS | 118 | Business Law I | 3 | 0 | 3 |
| BUS | 141 | Marketing | 3 | 0 | 3 |
| ENG | 110[5] | College Writing I | 3 | 0 | 3 |
| BUS | 112/110[1] | Quantitative Business Methods or Intro to Business | 3 | 0 | 3 |
| | | | **17** | **0** | **17** |
| **Spring Semester** | | | | | |
| BUS | 210 | Managerial Accounting | 4 | 0 | 4 |
| BUS | 120w | Business Law II | 3 | 0 | 3 |
| BUS | 115 | Business Statistics | 3 | 0 | 3 |
| | | [2]Foreign Language Elective | 4 | 0 | 4 |
| CST | 105 | Computer Applications | 2 | 2 | 3 |
| | | | **16** | **2** | **17** |
| **SECOND YEAR** | | | | | |
| **Fall Semester** | | | | | |
| ECO | 110w | Microeconomics | 3 | 0 | 3 |
| — | — | [2]Lab Science Elective | 3 | 3 | 4 |
| — | — | [2]Foreign Language Elective | 4 | 0 | 4 |
| PED | | Physical Education | 2 | 0 | 1 |
| BUS/SOS | 116 | International Business | 3 | 0 | 3 |
| HIS | 141/HIS 162 | | 3 | 0 | 3 |
| | | | **18** | **3** | **18** |
| **Spring Semester** | | | | | |
| ECO | 111 | Macroeconomics | 3 | 0 | 3 |
| MAT | 146 | Intro to Calculus or MAT 136[2] | 3-4 | 0 | 3-4 |
| BUS Elective[3] | 216/ | Special Topics in International Business or Elective | 3 | 0 | 3 |
| Advisor Approved General Education Course[4] | | | 3 | 0 | 3 |
| ENG | | [2]Advisor Approved ENG Course | 3 | 0 | 3 |
| | | | **15-16** | **0** | **15-16** |

**Total Credits: 67-68**

**Program supervised by:**

Jan Pitera
Office: Business Building, Room 107
Telephone: 607 778-5493
E-mail: pitera_j@sunybroome.edu

**Contact person:**
Michael Kuryla
Office: Mechanical Building, Room 222
Telephone: 607-778-5078
E-mail: kuryla_m@sunybroome.edu

**Curriculum Advisory Council: General Business**

Membership of the Business Department Advisory Council consists of representatives from area organizations. The Committee members are selected to serve on a rotating basis and are selected annually with some members remaining on the council for multiple terms.

[1]Depending on Mathematics entrance score and Math background, the student will take: MAT 090 and QBM or QBM or Introduction to Business.

[2]Be certain to consult advisor when selecting electives.

[3]Overseas Study Program, HIS 100, HUM 101, HUM 102, ART 102, ART 104, or other advisor approved general education course.

[4]See Advisor: Non general education electives may be acceptable for students not transferring or transferring to non-SUNY colleges.

[5]or ENG 111, based on placement test.

**Program supervised by:**
Marie A. Davenport
Office Business Building, Room 107
Telephone: 607-778-5008
E-mail: davenport_m@mail.sunybroome.edu

**Curriculum Advisory Council: Business Information Technology**

Membership of the Business Information Technology Advisory Council consists of representatives from area organizations. The Council members are selected to serve on a rotating basis with some members remaining on the Council for multiple terms.

**See also: Office Administration pg. 98**

# Business Information Management

## Associate in Applied Science[1]

Students who are interested in preparing for careers that require a solid foundation in business and technology would benefit from this program. Students will be able to plan a program of study that includes the skills and knowledge currently required for employment and takes into account the students' interests and abilities in those areas. The focus of this degree is to educate students in tools and techniques necessary to acquire, process, and manage information as it relates to one of the following areas of specialization: records information management, desktop publishing, website development and management or office technologies.

Two additional options are available for students who wish to obtain skills and knowledge in a particular field without committing to a full-time degree program: A 30-credit-state-approved certificate in each of the 4 areas of specialization – records information management, desktop publishing, web site development and management or office technologies.

SEQUENCE OF COURSES: This model is a two-year course schedule for students meeting all program requirements and deciding to pursue full-time study. Schedules will be designed for those requiring preparatory courses or those deciding to pursue part-time study.

## Desktop Publishing Emphasis

| FIRST YEAR | | Hrs/Wk | | Cred/Sem |
|---|---|---|---|---|
| **Fall Semester** | | **Class** | **Lab** | |
| ENG 110 | College Writing I | 3 | 0 | 3 |
| — — | [3]Social Science Elective | 3 | 0 | 3 |
| ART 105 | 2-Dimensional Design | 3 | 0 | 3 |
| BIT 173 | Basics of Website Creation | 3 | 0 | 3 |
| BIT 245 | Electronic Page Layout Using QuarkXPress | 3 | 0 | 3 |
| | | **15** | **0** | **15** |
| **Spring Semester** | | | | |
| — — | Lab Science Elective | 2 | 2 | 3 |
| ENG 111 | College Writing II | 3 | 0 | 3 |
| — — | BIT/BUS Elective | 3 | 0 | 3 |
| ART 125 | Computer Graphics | 3 | 0 | 3 |
| BIT 185 | Software Tools for Web and Print Publishing | 3 | 0 | 3 |
| | | **14** | **2** | **15** |

| SECOND YEAR | | Hrs/Wk | | Cred/Sem |
|---|---|---|---|---|
| **Fall Semester** | | **Class** | **Lab** | |
| — — | LA Elective | 3 | 0 | 3 |
| — — | [3]Social Science Elective | 3 | 0 | 3 |
| — — | BIT/BUS Elective | 3 | 0 | 3 |
| — — | BIT/BUS Elective | 3 | 0 | 3 |
| ART 202 | Commercial Photography | 3 | 0 | 3 |
| BIT 240 | Desktop Publishing Using PageMaker | 3 | 0 | 3 |
| | | **18** | **0** | **18** |
| **Spring Semester** | | | | |
| — — | MAT/SCI Elective | 3 | 0 | 3 |
| — — | BIT/BUS Elective | 3 | 0 | 3 |
| — — | BIT/BUS Elective | 3 | 0 | 3 |
| 2 Electives from Approved List[2] | | 6 | 0 | 6 |
| | | **15** | **0** | **15** |

**Total Credits: 63**

## Office Technologies Emphasis (one example)

| FIRST YEAR | | Hrs/Wk | | Cred/Sem |
|---|---|---|---|---|
| **Fall Semester** | | **Class** | **Lab** | |
| ENG 110 | College Writing I | 3 | 0 | 3 |
| — — | [3]Social Science Elective | 3 | 0 | 3 |
| BIT 100 | Keyboarding | 3 | 0 | 3 |
| BIT 110 | Business English | 3 | 0 | 3 |
| BIM 100 | Introduction to Business Information Management | 3 | 0 | 3 |
| | | **15** | **0** | **15** |
| **Spring Semester** | | | | |
| — — | Lab Science Elective | 2 | 2 | 3 |
| ENG 111 | College Writing II | 3 | 0 | 3 |
| — — | BIT/BUS Elective | 3 | 0 | 3 |
| BIT 130 | Word Processing | 3 | 0 | 3 |
| BIT 140W | Business Communications | 3 | 0 | 3 |
| | | **14** | **2** | **15** |

| SECOND YEAR | | Hrs/Wk | | Cred/Sem |
|---|---|---|---|---|
| **Fall Semester** | | **Class** | **Lab** | |
| — — | LA Elective | 3 | 0 | 3 |
| — — | [3]Social Science Elective | 3 | 0 | 3 |
| — — | BIT/BUS Elective | 3 | 0 | 3 |
| — — | BIT/BUS Elective | 3 | 0 | 3 |
| BIT 200 | Spreadsheets with Business Applications | 3 | 0 | 3 |
| BIT 250 | Integrated Business Office Applications | 3 | 0 | 3 |
| | | **18** | **0** | **18** |
| **Spring Semester** | | | | |
| — — | MAT/SCI Elective | 3 | 0 | 3 |
| — — | BIT/BUS Elective | 3 | 0 | 3 |
| BIT 275 | Advanced Business Communications | 3 | 0 | 3 |
| BIT 280 | Office Administration | 3 | 0 | 3 |
| BIT 297 | Internship | 3 | 0 | 3 |
| | | **15** | **0** | **15** |

**Total Credits: 63**

**[1]Certificates are available in Desktop Publishing, Office Technologies, Records Information Management and Website Development and Management, for students who complete a predetermined selection of courses on this page. Please contact the chairperson, above, for more information.**

W - Writing Emphasis Course

Mathematics entrance score and Math background will determine math course placement.

Students should check with their advisors during the scheduling process to make sure courses are taken in proper sequence and any prerequisites have been met. Some flexibility is available as to when courses must be taken, but not all courses are offered every semester.

[2]Approved Elective List
ART Approved elective
BIT 265 Project Management
BUS 141 Marketing
BIT 182 Designing Web Pages
BIT 190 Animation for the electronic media
BIT 197 Cooperative Work Experience
ART, BIT, BUS, CST, or COM elective with approval of advisor

[3]Advisor approved General Education Elective

## Records Information Management Emphasis

| FIRST YEAR | | Hrs/Wk | | Cred/Sem |
|---|---|---|---|---|
| **Fall Semester** | | Class | Lab | |
| ENG 110 | College Writing I | 3 | 0 | 3 |
| — — | [1]Social Science Elective | 3 | 0 | 3 |
| BIT 100 | Keyboarding | 3 | 0 | 3 |
| BIT 169 | Mastering the Internet & the WWW | 3 | 0 | 3 |
| BIM 100 | Introduction to Business Information Management | 3 | 0 | 3 |
| | | **15** | **0** | **15** |
| **Spring Semester** | | | | |
| — — | Lab Science Elective | 2 | 2 | 3 |
| ENG 111 | College Writing II | 3 | 0 | 3 |
| — — | BIT/BUS Elective | 3 | 0 | 3 |
| BIT 130 | Word Processing | 3 | 0 | 3 |
| BIM 110 | Systems & Procedures in Business Records Mgmt. | 3 | 0 | 3 |
| | | **14** | **2** | **15** |

| SECOND YEAR | | Hrs/Wk | | Cred/Sem |
|---|---|---|---|---|
| **Fall Semester** | | Class | Lab | |
| — — | LA Elective | 3 | 0 | 3 |
| — — | [1]Social Science Elective | 3 | 0 | 3 |
| — — | BIT/BUS Elective | 3 | 0 | 3 |
| — — | BIT/BUS Elective | 3 | 0 | 3 |
| BIT 200 | Spreadsheets with Business Applications | 3 | 0 | 3 |
| BIM 200 | Business Records Management Technologies | 3 | 0 | 3 |
| | | **18** | **0** | **18** |
| **Spring Semester** | | | | |
| — — | MAT/SCI Elective | 3 | 0 | 3 |
| — — | BIT/BUS Elective | 3 | 0 | 3 |
| BIT 280 | Office Administration | 3 | 0 | 3 |
| BIM 290 | Special Topics in RIM | 3 | 0 | 3 |
| BIM 297 | Internship | 3 | 0 | 3 |
| | | **15** | **0** | **15** |

**Total Credits: 63**

## Website Development and Management Emphasis

| FIRST YEAR | | Hrs/Wk | | Cred/Sem |
|---|---|---|---|---|
| **Fall Semester** | | Class | Lab | |
| ENG 110 | College Writing I | 3 | 0 | 3 |
| — — | [1]Social Science Elective | 3 | 0 | 3 |
| BIT 173 | Basics of Website Creation | 3 | 0 | 3 |
| 2 Electives from Certificate p. 47 | | 6 | 0 | 6 |
| | | **15** | **0** | **15** |
| **Spring Semester** | | | | |
| — — | Lab Science Elective | 2 | 2 | 3 |
| ENG 111 | College Writing II | 3 | 0 | 3 |
| BIT 182 | Designing Effective Web Pages | 3 | 0 | 3 |
| BIT 185 | Software Tools for Web and Print Publishing | 3 | 0 | 3 |
| BUS 190 | Marketing for the WWW | 3 | 0 | 3 |
| | | **14** | **2** | **15** |

| SECOND YEAR | | Hrs/Wk | | Cred/Sem |
|---|---|---|---|---|
| **Fall Semester** | | Class | Lab | |
| — — | LA Elective | 3 | 0 | 3 |
| — — | [1]Social Science Elective | 3 | 0 | 3 |
| BIT 186 | Interactive Websites | 3 | 0 | 3 |
| 2 BIT/BUS Electives | | 6 | 0 | 6 |
| BIT 190 | Animation for the Electronic Media | 3 | 0 | 3 |
| | | **18** | **0** | **18** |
| **Spring Semester** | | | | |
| — — | MAT/SCI Elective | 3 | 0 | 3 |
| 1 BIT/BUS Elective | | 3 | 0 | 3 |
| CST 120 | Java or | | | |
| BIM 150 | Understanding Electronic Commerce | 3 | 0 | 3 |
| 2 Electives from Certificate p. 47 | | 3 | 0 | 3 |
| | | **15** | **0** | **15** |

**Total Credits: 63**

**Program supervised by:**

Marie A. Davenport
Office Business Building, Room 107
Telephone: 607-778-5008
E-mail: davenport_m@mail.sunybroome.edu

**Curriculum Advisory Council: Business Information Technology**

Membership of the Business Information Technology Advisory Council consists of representatives from area organizations. The Council members are selected to serve on a rotating basis with some members remaining on the Council for multiple terms.

**See also: Website Development and Management Certificate pg. 46**

**Certificates are available in Desktop Publishing, Office Technologies, Records Information Managment and Website Development and Management, for students who complete a predetermined selection of courses. Please contact the chairperson, above, for more information.**

W - Writing Emphasis Course

Mathematics entrance score and Math background will determine Math course placement.

Students should check with their advisors during the scheduling process to make sure courses are taken in proper sequence and any prerequisites have been met. Some flexibility is available as to when courses must be taken, but not all courses are offered every semester.

[1]Advisor Approved General Education Elective.

**Program supervised by:**

Marie A. Davenport
Office Business Building, Room 107
Telephone: 607-778-5008
E-mail: davenport_m@mail.sunybroome.edu

**Curriculum Advisory Council: Business Information Technology**

Membership of the Business Information Technology Advisory Council consists of representatives from area organizations. The Council members are selected to serve on a rotating basis with some members remaining on the Council for multiple terms.

## Website Development and Management Certificate

**REQUIRED COURSES PLUS ONE OF THE THREE OPTIONS BELOW**

Basics of Website Creation (BIT 173)
Marketing for the WWW (BUS 190)
Software Tools for Web and Print Publishing (BIT 185)
Designing Effective Web Pages (BIT 182)
Interactive Websites (BIT 186)
Java Programming (CST 120) OR Understanding Electronic Commerce (BIM 150)

**Design emphasis: Four courses (Must take all three listed plus one other)**

Introduction to Two-Dimensional Design (ART 105)
Commercial Photography (ART 202)
Computer Graphics (ART 125)

**Computer programming emphasis: Four courses (Must take all three listed plus one other)**

Introduction to C++ (CST 113)
Introduction to CGI Programming (CST 124)
Database Systems (CST 213)

**Individualized emphasis: Four courses (Can take any four including those from design or computer emphasis)**

Animation for the Electronic Media (BIT 190)
Database Information Management for Marketing (DMK 175)
Project Management (BIT 265)
Desktop Publishing Using PageMaker (BIT 240)
Cooperative Work Experience (BIT 197)
Approved BIT, ART, CST, COM or BUS elective

A total of 30 credits required for certificate completion.
Course work required for completion of this certificate can be used for:
Associate of Applied Science in Business Information Management (see pages 44 & 45).
OR
Associate of Applied Science in Computer Technology: Webtrack (see page 53).

**Certificates are available in Desktop Publishing, Office Technologies, Records Information Managment and Website Development and Management, for students who complete a predetermined selection of courses on this page. Please contact the chairperson, above, for more information.**

# Business Skills

### Certificate Program

The Business Skills Certificate provides the opportunity for a student to complete basic study in business with a concentration in a career skills area. Students may complete the program in as little as nine months, depending on the exact sequence of courses chosen or take longer if they wish. Courses taken for the certificate may then be used towards an Associates degree in Business if the student desires.

All students take the core courses below, and then complete at least an additional 15-credit concentration in their area of interest. Some sample concentrations are listed below. The student may choose from these, or develop their own with the assistance of a business advisor.

| Core Degree Requirements | | Credits |
|---|---|---|
| BUS 100 | Accounting I | 4 |
| BUS 112 | Quantitative Business Methods | 3 |
| BUS 118 | Business Law I | 3 |
| BUS 141 | Marketing | 3 |
| BUS 109 | Workplace Readiness | 1 |
| **TOTAL CORE CREDITS** | | **14** |

## Concentration In Accounting

| Courses | | Credits |
|---|---|---|
| BUS 101 | Accounting II | 4 |
| BUS 200 | Intermediate Accounting I | 4 |
| BUS 205 | Cost Accounting I | 4 |
| BUS 210 | Managerial Accounting | 4 |
| CST 105 | Understanding Computers | 3 |

## Concentration In Customer Service

| Courses | | Credits |
|---|---|---|
| BUS 129[1] | Consumer Behavior | 3 |
| OR | | |
| BUS 269 | Business Reports and Computer Communications | |
| BUS 152 | Selling Fundamentals | 3 |
| BUS 214 | Customer Service | 3 |
| Work Activity Co-Op | | 4 |
| BUS 267 | Retailing In a Service Economy | 3 |

## Concentration In Financial Services

| Courses | | Credits |
|---|---|---|
| BUS 131 | Personal Finance | 3 |
| BUS 135 | Investments | 3 |
| BUS 172 | NYS Life, Accident, and Health Pre Licensing | 2 |
| BUS 183 | Securities Training 6/63 | 3 |
| BNK 184 or BUS 184 | Securities Practicum | 4 |

## Concentration In Food Service Supervisor

| Courses | | Credits |
|---|---|---|
| BHM 110 | Sanitation and Safety | 2 |
| BHM 125 | Hospitality Law | 3 |
| BHM 201 | Internship | 3 |
| BHM 216 | Quantity Food Production | 3 |
| BHM 235 | Hotel/Restaurant Cost Control | 4 |
| BUS 248 | Human Resource Management | 3 |

## Concentration In Healthcare Services

| Courses | | Credits |
|---|---|---|
| HCM 193 | Introduction to U.S. Healthcare | 3 |
| HCM 194 | Healthcare Financing | 3 |
| HCM 195 | Managed Health Delivery Systems | 3 |
| BUS 248 | Human Resource Management | 3 |
| HCM | Healthcare Elective | 3 |

**Program supervised by:**

Jan Pitera
Office: Business Building, Room 108
Telephone: 607 778-5493
E-mail: pitera_j@sunybroome.edu

John Bunnell
Office: Business Building, Room 218
Telephone: 607 778-5143
E-mail: bunnell_j@sunybroome.edu

**Curriculum Advisory Council: General Business**

Membership of the Business Department Advisory Council consists of representatives from area organizations. The Committee members are selected to serve on a rotating basis and are selected annually with some members remaining on the council for multiple terms.

[1]Selection to be made based on advisement.

**Program supervised by:**

Jacqueline Shrader, Coordinator
Office: Titchener, Room 011B
Telephone: 607 778-5321
E-mail: shrader_j@sunybroome.edu

**Curriculum Advisory Council: Chemical Dependency Counseling**

Membership of the Chemical Dependency Counseling Program (CDC) Advisory Council consists of directors and staff from area treatment facilities, as well as CDC program faculty and students.

# Chemical Dependency Counseling

## Associate in Applied Science

This program is designed to prepare students as paraprofessionals in the field of alcohol and substance abuse treatment. The program is also designed to provide continuing education for individuals presently working in the field. The curriculum is liberal arts based with a concentration in alcohol and drug specialization courses. Coursework is enhanced with two supervised clinical internships.

Coursework is formulated to meet the educational component necessary to apply for New York State Credentialed Alcoholism and Substance Abuse Counselor (CASAC). Internships will partially fulfill requirements for supervised work experience for the credential.

Graduates are prepared to work in alcohol and drug treatment facilities, correctional facilities, employee assistance programs, or as prevention/education specialists in school settings. Additionally, graduates can transfer to baccalaureate degree programs in human services, counseling, and social work.

| FIRST YEAR | | | Hours/Week | | Credits/Semester |
|---|---|---|---|---|---|
| **Fall Semester** | | | Class | Lab | |
| ENG | 110 | College Writing I or ENG 111 College Writing II | 3 | 0 | 3 |
| PSY | 110 | General Psychology | 3 | 0 | 3 |
| BIO | 131 | Human Biology I | 3 | 2 | 4 |
| SOC | 110/111 | Intro. to Sociology or Social Problems | 3 | 0 | 3 |
| ASA | 110 | Intro. to Chemical Dependency | 3 | 0 | 3 |
| PED | | Physical Education Elective | 0 | 2 | 1 |
| | | | **15** | **4** | **17** |
| **Spring Semester** | | | | | |
| SPK | 110 | Effective Speaking | 3 | 0 | 3 |
| PSY | 234 | Psychology of Addictions | 3 | 0 | 3 |
| PSY | 217 | Counseling and Interviewing | 3 | 0 | 3 |
| BIO | 132 | Human Biology II | 3 | 2 | 4 |
| ASA | 210 | Chemical Dependency Counseling I | 3 | 0 | 3 |
| | | | **15** | **2** | **16** |
| **SECOND YEAR** | | | | | |
| **Fall Semester** | | | | | |
| PSY | 214 | Abnormal Psychology | 3 | 0 | 3 |
| PSY | 227 | Behavior Modification | 3 | 0 | 3 |
| ASA | 220 | Chemical Dependency Counseling II | 3 | 0 | 3 |
| ASA | 230 | Chemical Dependency: Family Issues | 3 | 0 | 3 |
| ASA | 310[1] | Supervised Clinical Internship I | 1 | 15 | 4 |
| | | | **13** | **15** | **6** |
| **Spring Semester** | | | | | |
| ASA | 250/255/260 | Chemical Dependency Modules | 3 | 0 | 3 |
| MAT | 124 | Statistics I | 3 | 0 | 3 |
| ASA | 240 | Special Topics in Chemical Dependency | 3 | 0 | 3 |
| ASA | 320[1] | Supervised Clinical Internship II | 1 | 15 | 4 |
| ENG | 220 | Communicating About Ideas and Values | 3 | 0 | 3 |
| | | | **13** | **15** | **16** |

**GRADUATION REQUIREMENTS: 65 CREDITS**

W - Students must take two Writing Emphasis ("W") courses after ENG 110.

[1] **Criteria for Internships:**

Academic performance is not the only criterion for entrance into the internship components of the program. Professional and experiential considerations determine the appropriateness, performance expectations, and overall suitability of potential student interns. The coordinator and the chairperson of the Psychology, and Human Services Department and the ASA faculty may determine that a given student is not personally ready for internship in a given semester, even though that student has completed all the academic prerequisites for the course, and may not permit the student access to the internship until the problem in question has been adequately addressed.

Additionally, field supervisors at the provider agency may reject a candidate at the application interview for reasons they deem clinically appropriate and which they determine would make the student inappropriate for placement in that agency at that time. Field supervisors may also remove a student already accepted at any time during the internship if it is determined that the student is resistant to supervision or poses a potential threat/danger to clients in treatment.

REQUIRED PRIOR TO INTERNSHIP:

1. Physical Exam
2. TB test (PPD) and any follow up recommendations relative to the results
3. Rubella titer test and Rubella immunization if titer is negative
4. Hepatitus B immunization or a signed declination statement

TRANSPORTATION RELATED TO INTERNSHIP PLACEMENT: Students will be responsible for providing their own transportation to agencies at which they are assigned for clinical internship. Attempts will be made to accommodate clinical placement preferences when feasible and when academically appropriate. However, students should be prepared to travel to their internship placement when and wherever necessary.

FOLLOWING CLINICAL AGENCY POLICY DURING INTERNSHIP PLACEMENT: Students will be expected to comply with clinical agency policies in order to gain and maintain internship status. Such policies may include, for example, testing for tuberculosis, drug screening or policies about intern/employee drug use.

Registration predicated on number of internships available each semester.

# Civil Engineering Technology

### *Associate in Applied Science*

Civil Engineering Technology is an exciting, diverse field with excellent employment opportunities locally, state-wide, and nationally. Graduates are involved in all phases of the construction industry, from planning and design of buildings, bridges, highways, commercial and industrial facilities, to management and inspection of the construction process. Both men and women find rewarding careers with consulting engineering companies, construction companies, and governmental agencies, such as the New York State Department of Transportation or Broome County's engineering department.

The need to rebuild and repair the nation's aging infrastructure creates a strong market for Civil graduates. Entry-level jobs may be in computer aided design (CAD), highway design, surveying, structural detailing, construction materials testing, construction management, inspection, or cost estimating. Starting salaries for graduates of the program average over $28,000 per year.

The Civil Engineering Technology program is a modern educational program, incorporating state-of-the-art labs, CAD and other computer applications throughout the curriculum. It is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (TAC/ABET). The program is designed for immediate career opportunities; however, about 30% of the graduates transfer into Bachelor level programs, and receive full two-year transfer credit at a number of institutions.

SEQUENCE OF COURSES: This model is a two-year course schedule for students meeting all program requirements and deciding to pursue full-time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part-time study.

| FIRST YEAR | | | Hours/Week | | Credits/Semester |
|---|---|---|---|---|---|
| **Fall Semester** | | | Class | Lab | |
| CST | 106 | Computers in Technology | 2 | 2 | 3 |
| ENG | 110 | College Writing I | 3 | 0 | 3 |
| MAT | 130[1] | Applied Algebra and Trigonometry | 4 | 0 | 4 |
| CIV | 113 | Engineering Drawing I w/CAD | 1 | 3 | 2 |
| TEC | 100 | Technology Orientation | 0 | 1 | 0.5 |
| CIV | 136 | Construction Methods & Management | 3 | 0 | 3 |
| | | | **13** | **6** | **15.5** |
| **Spring Semester** | | | | | |
| CIV | 114 | Civil Drafting w/CAD | 1 | 3 | 2 |
| CIV | 119 | Architectural Drawing w/CAD | 1 | 3 | 2 |
| CIV | 124 | Mechanics | 3 | 0 | 3 |
| ENG | 150 | Technical Writing | 3 | 0 | 3 |
| MAT | 160[1] | Applied Calculus I | 4 | 0 | 4 |
| PHY | 161[2] | Physics I | 3 | 3 | 4 |
| | | | **15** | **9** | **18** |
| **SECOND YEAR** | | | | | |
| **Fall Semester** | | | | | |
| CIV | 201 | Surveying I | 2 | 6 | 4 |
| CIV | 219 | Strength of Materials | 4 | 0 | 4 |
| CIV | 217w | Materials Testing | 2 | 3 | 3 |
| PHY | 162[2] | Physics II | 3 | 3 | 4 |
| CIV | 238 | Arch. Design & Bldg. Matl/s. w/CAD | (2) | (3) | (3) |
| | | OR | | | |
| CIV | 237 | Hydraulics/Storm Water Management | (2) | (3) | (3) |
| | | | **13** | **15** | **18** |
| **Spring Semester** | | | | | |
| CIV | 224 | Reinforced Concrete Design | (2) | (3) | (3) |
| | | OR | | | |
| CIV | 226 | Structural Steel Design | (2) | (3) | (3) |
| CIV | 202 | Surveying II | 3 | 3 | 4 |
| CIV | 240 | Soil Mechanics | 2 | 3 | 3 |
| CIV | 231 | Estimating & Construction Planning | 1 | 3 | 2 |
| SOS | 120 | Science, Tech. & Democratic Society | 3 | 0 | 3 |
| ---------- | | Social Science Elective | 3 | 0 | 3 |
| | | | **14** | **12** | **18** |

**GRADUATION REQUIREMENTS: 69-1/2 CREDITS**

[1]or MAT 181, 182

[2]or PHY 181, 182

w - Writing Emphasis Course

**Program supervised by:**

Kelli Ligeikis, P.E.
Office: Mechanical Building, Room 117
Telephone: 607 778-5010
E-mail: ligeikis_k@sunybroome.edu

**Curriculum Advisory Council: Civil Engineering Technology**

JAMES BRYDEN, AIA / Bryden Architects

DAVID LIGEIKIS, P.E./Regional Planning and Program Manager/NYSDOT

WILLIAM R. MERWARTH, P.E./Senior Project Manager, McFarland Johnson, Inc.

MARC NEWMAN/Newman Development

DENNIS T. O'DEA, P.E. / Project Engineer, NYSEG

LINDA SHUMAKER, P.E. / Shumaker Consulting Engineers

RALPH VERRASTRO, P.E. / President, Delta Engineers, P.C.

GARY WOOD, P.E. / Consulting Engineer

**Program supervised by:**

Francia Espinosa
Office: Titchener 111A
Telephone: 607 778-5160

John Butchko
Office: Titchener Hall, Room 103
Telephone: 607 778-5101

# Communication and Media Arts

## Associate in Science Transfer Program

The Program of instruction in Communication and Media Arts comprises theoretical and practically-oriented course offerings in audio and video production, photography, film, acting, and various types of communication. Communications courses emphasize acquisition of both technical proficiency and theoretical knowledge.

The program aims, on the one hand, to prepare graduates for immediate employment in a variety of communications-related occupations, and on the other hand, for transfer to Baccalaureate programs.

Graduates entering the job market after earning the associate degree will seek employment as production assistants, educational media technicians, media sales representatives, writers, on-air personnel and photographers.

Those transferring to upper division colleges will major in audio-visual technology, film and photography, technical communications, radio and TV broadcasting, journalism, graphic reproduction, acting and advertising. Subsequently, they will seek employment as photographers, filmmaker/cinematographers, scriptwriters, media producers, broadcasters, newspaper reporters, studio technicians, instructional media specialists, video and audio engineers, copy writers, media directors, actors and actresses, production media specialists, and sales or marketing managers.

SEQUENCE OF COURSES: This model is a two-year course schedule (leading to an A.S. degree) for students meeting all program requirements and deciding to pursue full-time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part-time study.

| FIRST YEAR | | | Hours/Week | | Credits/Semester |
|---|---|---|---|---|---|
| **Fall Semester** | | | Class | Lab | |
| ENG | 110 | College Writing I | 3 | 0 | 3 |
| HIS | 100 | Rise of the West | 3 | 0 | 3 |
| COM | 100 | Intro to Mass Media | 3 | 0 | 3 |
| COM | | Elective (Choose one) | 3 | 0 | 3 |
| | | ART 112 Beginning Photography | | | |
| | | COM 125 Intro to Audio Theory & Production | | | |
| | | COM 130 Intro to Video Theory & Production | | | |
| | | COM 205 Intro to Filmmaking | | | |
| | | THR 140 Announcing for Radio/TV | | | |
| | | THR 266 Acting TV, Film, Commercials | | | |
| MAT | | Mathematics | 3-4 | 0 | 3-4 |
| PED | | Phys. Ed. (cardiovascular) | 0 | 2 | 1 |
| | | | **15-16** | **2** | **16-17** |
| **Spring Semester** | | | | | |
| SOS | 155w | Media & Society | 3 | 0 | 3 |
| | | Civic Ed. Requirement | 3 | 0 | 3 |
| COM Electives (Choose 2) | | | 6 | 0 | 6 |
| | | COM 125 Intro to Audio | | | |
| | | COM 130 Intro to Video | | | |
| | | COM 150 Intro to Public Relations | | | |
| | | COM 210 Advanced Video | | | |
| | | THR 276 Rehearsal & Performance for TV | | | |
| | | ART 212 Intermediate Photography | | | |
| | | ART 125 Intro to Computer Graphics | | | |
| Science Elective | | | 3(4) | 0-1 | 4 |
| | | | **15(16)** | **1** | **16** |
| **SECOND YEAR** | | | | | |
| **Fall Semester** | | | | | |
| SPK | 110 | Effective Speaking | 3 | 0 | 3 |
| COM | 200w | Image Theory | 3 | 0 | 3 |
| CST | 105 | Understanding Computers OR | | | |
| BIT | 180 | Communications/Computers | 3 | 0 | 3 |
| COM | | Electives | 6 | 0 | 6 |
| | | | **15** | **0** | **15** |
| **Spring Semester** | | | | | |
| COM | 115 | Writing for the Media | 3 | 0 | 3 |
| COM | 240 | Media Research | 3 | 0 | 3 |
| ENG | 220 | Communicating about Ideas/Values | 3 | 0 | 3 |
| COM | | Electives | 6 | 0 | 6 |
| | | | **15** | **0** | **15** |

**GRADUATION REQUIREMENT: 62 CREDITS**

[1]A minimum of 1 credit must be taken from PED 118, 119, 127, 135, 137, 143, 146, 147, 148, 155, 173.

[2]HIS 130, 131, POS 201, 204, ECO 111, SOC 110, SOC 111, SOS 101, 111, 120

[3]COM electives ART 112, 125, 146, 202, 212, 225, COM 125, 130, 145, 150, 205, 210, 240, 260 (250 and 299 by advisement only), ENG 175, THR 140, 266, 276 or advisor approved elective.

[4]MAT – Students transferring to a four-year college are advised to complete MAT 136 or MAT 124.

# Computer Information Systems

## Associate in Applied Science

The Computer Information Systems program consists of a sequence of college level courses leading to the Associate in Applied Science degree. The curriculum emphasizes both the theory and application of established computer programming and business methods, and prepares the students for immediate employment. Graduates are prepared to work in a business environment where a knowledge of computer programming and application software is necessary. These positions may include computer operator, junior programmer, application developer, database specialist, and information processing or computer inventory control.

The program may take more than two years to complete depending on a student's academic background. Preparatory courses are offered for students not meeting entry requirements for the regular Computer Information Systems program. Courses taken to meet prerequisite requirements will not count as credit towards the Computer Information Sytems degree. Transfer to four-year schools to pursue a bachelor of science program in Computer Information Systems, Management Information Systems or Business Management is available. Students planning to transfer should seek the advice of the department chairperson. Students can attend full-time or part-time, both day and evening.

| FIRST YEAR | | HOURS/WEEK | | CREDITS/SEMESTER |
|---|---|---|---|---|
| **Fall Semester** | | Class | Lab | |
| CST 113 | Intro. to C++ | 2 | 2 | 3 |
| CST 117 | Language Independent Design Tools | 2 | 0 | 2 |
| CST 119 | Computer Concepts and Applications | 2 | 2 | 3 |
| ENG 110 | College Writing I | 3 | 0 | 3 |
| BUS 100 | Accounting I or | | | |
| BUS 111[1] | Financial Accounting | 4 | 0 | 4 |
| HIS | Elective | 3 | 0 | 3 |
| | | **16** | **4** | **18** |
| **Spring Semester** | | | | |
| CST 128 | Structured Programming in COBOL | 3 | 2 | 4 |
| BUS 101 | Accounting II or | | | |
| BUS 210[1] | Management Accounting | 4 | 0 | 4 |
| CST 158 | Spreadsheets - Financial Applications | 2 | 2 | 3 |
| CST, BUS, MAT Elective (BUS 118[1] recommended) | | 2-4 | 0-2 | 3-4 |
| Social Science Elective - Writing Emphasis | | 3 | 0 | 3 |
| | | **14-16** | **4-6** | **17-18** |
| **SECOND YEAR** | | | | |
| **Fall Semester** | | | | |
| CST 208 | Intro. to Networking | 3 | 0 | 3 |
| CST 216 | Visual Basic.NET | 2 | 2 | 3 |
| CST 213 | Database Systems | 2 | 2 | 3 |
| MAT 124 | Statistics I | 3 | 1 | 3 |
| SPK 110 | Effective Speaking | 3 | 0 | 3 |
| | | **13** | **5** | **15** |
| **Spring Semester** | | | | |
| CST 200w | Systems Analysis & Design | 2 | 2 | 3 |
| CST 226 | Advanced Visual Basic.NET | 2 | 2 | 3 |
| CST or MAT Elective (MAT 146 recommended) | | 2-4 | 0-2 | 3-4 |
| PHS | Elective | 3 | 3 | 4 |
| ENG 220[1] or ENG 150 | Communicating about Ideas and Values Technical Writing | 3 | 0 | 3 |
| | | **12-14** | **7-9** | **16-17** |

**GRADUATION REQUIREMENT: 66-68 CREDITS**

**Program supervised by:**

Chris H. Pappas
Office: Applied Technology Building, Room 011
Telephone: 607 778-5022
E-mail: pappas_c@sunybroome.edu

[1]These courses are recommended if transferring to a four-year program.

**Computer Recommendation:**

A student seeking a career in the computer programming profession should have a home computer. Students will have to use computers to write programs, analyze problems, make presentations, and write reports. Many assignments cannot be completed without computers. While the College provides access to computers, it is not possible to provide enough machines or convenient times for everyone. Students are strongly urged to purchase Windows-capable systems with speeds of at least 600 MHZ, with 128 Meg of RAM, and a 8 Gb hard drive. The CST department currently uses Microsoft Visual C++.NET as its main computing language.

w - Writing Emphasis Course

**Program supervised by:**

Chris H. Pappas
Office: Applied Technology Building, Room 011
Telephone: 607 778-5022
E-mail: pappas_c@sunybroome.edu

# Computer Science

## *Associate in Science Transfer Program*

The Computer Science program leads to an Associate in Science degree and prepares students for transfer to a four year college or university. In the first semester, the student must select a course sequence with a focus on their transfer program.

The following course sequences are given to help the student visualize typical student schedules. Each individual student's schedule is determined with the help of a computer studies academic advisor. The Information Systems course sequence prepares the student to continue toward a Bachelor's degree in Computer Information Systems, Management Information Systems, or Business. The Technical course sequence prepares the student to continue toward a Bachelor's degree in Computer Science. The Math course sequence prepares the student to continue toward a Bachelor's degree in Math or a Math/ Computer Science combination. Students generally transfer with junior standing.

| **FIRST YEAR** | | | **Hours/Week** | | **Credits/Semester** |
|---|---|---|---|---|---|
| **Fall Semester** | | | Class | Lab | |
| CST | 113 | Intro. to C++ | 2 | 2 | 3 |
| CST | 117 | Language Independent Design Tools | 2 | 0 | 2 |
| CST | 119 | Computer Concepts and Applications | 2 | 2 | 3 |
| CST | 170 | Digital Logic | 2 | 2 | 3 |
| ENG | 110 | College Writing I | 3 | 0 | 3 |
| MAT | 181 | Calculus I | 4 | 0 | 4 |
| | | | **15** | **6** | **18** |
| **Spring Semester** | | | | | |
| CST | 133 | Structured Programming in C++ | 2 | 2 | 3 |
| CST | 220 | Microprocessors and Assembly Language Programming | 2 | 2 | 3 |
| MAT | 182 | Calculus II | 4 | 0 | 4 |
| HIS | | Elective | 3 | 0 | 3 |
| PHI | 202 | Logic | 3 | 0 | 3 |
| | | Social Science Elective | 3 | 0 | 3 |
| | | | **17** | **4** | **19** |
| **SECOND YEAR** | | | | | |
| **Fall Semester** | | | | | |
| CST | 150 | C++ Programming with Objects | 2 | 2 | 3 |
| MAT | 250 | Discrete Math | 4 | 0 | 4 |
| MAT | 281 | Calculus III | 4 | 0 | 4 |
| or CST | 225w | Intro. to Small Systems | 2 | 2 | 3 |
| PHI | 161 | Physics I | 3 | 3 | 4 |
| or PHY | 181 | | 3 | 3 | 4 |
| HIS | | Elective | 3 | 0 | 3 |
| PED | | Elective | 0 | 2 | 1 |
| | | | **14-16** | **7-9** | **18-19** |
| **Spring Semester** | | | | | |
| CST | 202w | Data Structures with C++ | 2 | 2 | 3 |
| ENG | 220 | Communicating about Ideas and Values | 3 | 0 | 3 |
| MAT | 264 | Linear Algebra | 4 | 0 | 4 |
| MAT | 266 | Intro. to Higher Math | 3 | 0 | 3 |
| or CST | 228w | GDI Programming with C++ | 2 | 2 | 3 |
| PHY | 162 | Physics II | 3 | 3 | 4 |
| or PHY | 182 | | | | |
| PED | | Elective | 0 | 2 | 1 |
| | | | **14-15** | **7-9** | **18** |

**GRADUATION REQUIREMENT: 73-74 CREDITS**

**Computer Recommendation:**

A student seeking a career in the computer programming profession should have a home computer. Students will have to use computers to write programs, analyze problems, make presentations, and write reports. Many assignments cannot be completed without computers. While the College provides access to computers, it is not possible to provide enough machines or convenient times for everyone. Students are strongly urged to purchase Windows-capable systems with speeds of at least 600 MHZ, with 128 Meg of RAM, and a 8 Gb hard drive. The CST department currently uses Microsoft Visual C++.NET as its main computing language.

**NOTE:** The program may take more than two years to complete depending on a student's academic background. Preparatory courses are offered for students not meeting entry requirements into the regular Computer Science program. Courses taken to meet prerequisite requirements will not count as credit towards the Computer Science degree. Students can attend full-time or part-time, both day and evening.

w - Writing Emphasis Course

# Computer Technology

### Associate in Applied Science

The Computer Technology program consists of a sequence of college level courses leading to the Associate in Applied Science degree. Computer Technology places less emphasis on mathematics and more on computer hardware, digital logic, and microprocessors. Graduates are prepared to work in a technical environment where a knowledge of the interface between hardware and software is necessary. These positions may include computer operators, technician/programmers, or engineering aides, working on large software projects or working directly with digital devices such as microprocessors and computer interfaces for sensors and controllers.

The program may take more than two years to complete depending on a student's academic background. Preparatory courses are offered for students not meeting entry requirements for the regular Computer Technology program. Courses taken to meet prerequisite requirements will not count as credit towards the Computer Technology degree. Students may elect to transfer to four-year schools to pursue a bachelor of science program in Computer Science or Information Technology. Students planning to transfer should seek the advice of the department chairperson. Students can attend full-time or part-time, both day and evening.

**Program supervised by:**

Chris H. Pappas
Office: Applied Technology Building, Room 011
Telephone: 607 778-5022
E-mail: pappas_c@sunybroome.edu

## Technical Track

| FIRST YEAR | | Hrs/Wk | | Cred/Sem |
|---|---|---|---|---|
| **Fall Semester** | | **Class** | **Lab** | |
| CST106 | Computers in Technology | 2 | 2 | 3 |
| CST113 | Intro to C++ | 2 | 2 | 3 |
| CST117 | Language Independent Design Tools | 2 | 2 | 3 |
| CST119 | Computer Concepts and Applications | 2 | 2 | 3 |
| EET125 | DC Circuits and Laboratory | 2 | 2 | 3 |
| MAT130 | Applied Algebra and Trigonometry | 4 | 0 | 4 |
| TEC100 | Intro. to Technology | 1 | 0 | 0.5 |
| | | **15** | **10** | **19.5** |
| **Spring Semester** | | | | |
| CST170 | Digital Logic | 2 | 2 | 3 |
| CST220 | Microprocessors and Assembly Lang. Prog. | 2 | 2 | 3 |
| EET126 | AC Circuits and Laboratory | 2 | 2 | 3 |
| ENG110 | College Writing I | 3 | 0 | 3 |
| MAT160 | Applied Calculus | 4 | 0 | 4 |
| Social Science Elective | | 3 | 0 | 3 |
| | | **16** | **6** | **19** |

| SECOND YEAR | | Hrs/Wk | | Cred/Sem |
|---|---|---|---|---|
| **Fall Semester** | | **Class** | **Lab** | |
| CST208 | Intro. to Networking | 3 | 0 | 3 |
| CST216 | Visual Basic.NET | 2 | 2 | 3 |
| CST225w | Intro. to Small Sys. | 2 | 2 | 3 |
| HIS | Elective | 3 | 0 | 3 |
| PHY161 | Physics I | 3 | 3 | 4 |
| | | **13** | **7** | **16** |
| **Spring Semester** | | | | |
| CST140 | Computer Maint. | 2 | 2 | 3 |
| CST | Elective | 2 | 2 | 3 |
| EET150w | Electronic Devices | 4 | 3 | 4 |
| ENG150 | Technical Writing | 3 | 0 | 3 |
| PHY162 | Physics II | 3 | 3 | 4 |
| | | **14** | **10** | **17** |

**Graduation Requirements: 71.5 Credits**

w-Writing Emphasis Course

## Network Track

| FIRST YEAR | | Hrs/Wk | | Cred/Sem |
|---|---|---|---|---|
| **Fall Semester** | | **Class** | **Lab** | |
| CST106 | Computers in Technology | 2 | 2 | 3 |
| CST113 | Intro to C++ | 2 | 2 | 3 |
| CST117 | Language Indep. Design | 2 | 0 | 2 |
| CST119 | Computer Concepts | 2 | 2 | 3 |
| ENG110 | College Writing I | 3 | 0 | 3 |
| TEC100 | Orientation | 1 | 0 | 0.5 |
| Social Science Elective | | 3 | 0 | 3 |
| | | **15** | **6** | **17.5** |
| **Spring Semester** | | | | |
| CST120 | Java Programming | 2 | 2 | 3 |
| CST170 | Digital Logic | 2 | 2 | 3 |
| CST220 | Microprocessors and Assembly Lang. | 2 | 2 | 3 |
| MAT124 | Statistics I | 3 | 0 | 3 |
| Social Science Elective | | 3 | 0 | 3 |
| | | **12** | **6** | **15** |

| SECOND YEAR | | Hrs/Wk | | Cred/Sem |
|---|---|---|---|---|
| **Fall Semester** | | **Class** | **Lab** | |
| CST208 | Intro. to Networking | 3 | 0 | 3 |
| CST213 | Database Systems | 2 | 2 | 3 |
| CST216 | Visual Basic.NET | 2 | 2 | 3 |
| CST225w | Intro. to Small Systems | 2 | 2 | 3 |
| PHS | Elective with Lab | 3 | 1 | 4 |
| | | **12** | **7** | **16** |
| **Spring Semester** | | | | |
| CST140 | Computer Maint. | 2 | 2 | 3 |
| CST209 | Adv. Networking | 2 | 2 | 3 |
| CST219 | Socket Programming | 2 | 2 | 3 |
| CST | Elective | 2 | 2 | 3 |
| ENG150 | Technical Writing | 3 | 0 | 3 |
| | | **11** | **8** | **15** |

**Graduation Requirements: 63.5 Credits**

w-Writing Emphasis Course

## Web Track

| FIRST YEAR | | Hrs/Wk | | Cred/Sem |
|---|---|---|---|---|
| **Fall Semester** | | **Class** | **Lab** | |
| BIT173 | Website Creation | 3 | 0 | 3 |
| BIT185 | Software Tools for Web Publishers | 3 | 0 | 3 |
| CST106 | Computers in Technology | 2 | 2 | 3 |
| CST113 | Intro to C++ | 2 | 2 | 3 |
| CST117 | Language Independent Design | 2 | 2 | 3 |
| ENG110 | College Writing I | 3 | 0 | 3 |
| | | **15** | **6** | **18** |
| **Spring Semester** | | | | |
| BIT182 | Designing Effective Web Pages | 3 | 0 | 3 |
| BIT186 | Interactive Websites | 3 | 0 | 3 |
| CST120 | Java Programming | 3 | 0 | 3 |
| CST119 | Computer Concepts | 2 | 2 | 3 |
| History Elective | | 3 | 0 | 3 |
| | | **14** | **2** | **15** |

| SECOND YEAR | | Hrs/Wk | | Cred/Sem |
|---|---|---|---|---|
| **Fall Semester** | | **Class** | **Lab** | |
| BIM150 | Understanding E-Commerce | 3 | 0 | 3 |
| BUS190 | Marketing and the WWW | 3 | 0 | 3 |
| CST208 | Intro. to Networking | 3 | 0 | 3 |
| CST213 | Database Systems | 2 | 2 | 3 |
| MAT124 | Statistics I | 3 | 0 | 3 |
| Social Science Elective | | 3 | 0 | 3 |
| | | **17** | **2** | **18** |
| **Spring Semester** | | | | |
| CST124 | Intro. to CGI Programming | 3 | 0 | 3 |
| CST/BIT | Elective | 3 | 0 | 3 |
| CST/BIT | Elective | 3 | 0 | 3 |
| ENG150 | Technical Writing | 3 | 0 | 3 |
| PHS | Elective with Lab | 3 | 3 | 4 |
| | | **15** | **3** | **16** |

**Graduation Requirements: 67 Credits**

**(For information on Website Development and Management Certificate see page 46.)**

**Computer Recommendation:**

A student seeking a career in the computer technology profession should have a home computer. Students will have to use computers to write programs, analyze problems, make presentations, and write reports. Many assignments cannot be completed without computers. While the College provides access to computers, it is not possible to provide enough machines or convenient times for everyone. Students are strongly urged to purchase Windows-capable systems with speeds of at least 600 MHZ, with 128 Meg of RAM, and a 8 Gb hard drive. The CST department currently uses Microsoft Visual C++.NET as its main computing language.

w - Writing Emphasis Course

**Program supervised by:**

Gregory B. Talley
Office: Titchener Hall, Room 210F
Telephone: 607 778-5192

**Curriculum Advisory Council: Criminal Justice**

CARL FENESCY / Broome County Security Director
DAVID HARDER / Broome County Sheriff
ROBERT KENT / NYS Office of Parole
ALEX MINOR / Binghamton Police Department
ROGER SHALLER / Binghamton Police Department
HON. MARTIN SMITH / Broome County Judge
STEPHEN VIZVARY / Security Consultant
RICHARD WAFFLE / NYS Park Police

# Criminal Justice-Corrections

## Associate in Science Transfer Program

This program is designed for full-time students desiring employment after two years of study in a corrections field as well as for students wishing to transfer to a four year college upon graduation from Broome Community College. The course of study includes a mixture of SUNY approved general education requirements, core criminal justice courses, and courses directly related to corrections. Students currently employed in corrections will also benefit from this course of study. Careful planning and selection of courses is necessary to complete the program in two years.

SEQUENCE OF COURSES: This model is a two-year course schedule for students meeting all program requirements and who decide to pursue full-time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part-time study. Many students find it helpful to ease their course load during the school year by taking general education requirements during summer terms.

| FIRST YEAR | | | Hours/Week | | Credits/Semester |
|---|---|---|---|---|---|
| **Fall Semester** | | | Class | Lab | |
| ENG | 110 | College Writing I | 3 | 0 | 3 |
| PSY | 110 | General Psychology | 3 | 0 | 3 |
| MAT | 124 | Statistics | 3 | 0 | 3 |
| CRJ | 101 | Introduction to Criminal Justice | 3 | 0 | 3 |
| CRJ | 105 | Introduction to Corrections | 3 | 0 | 3 |
| PED | 118 | Personal Fitness | 0 | 2 | 1 |
| | | | **15** | **2** | **16** |
| **Spring Semester** | | | | | |
| ENG | 111 | College Writing II | 3 | 0 | 3 |
| HIS | 100 | Rise of the West | 3 | 0 | 3 |
| — | — | Laboratory Science | 2-3 | 2-3 | 3-4 |
| CRJ | 115 | Juvenile Justice | 3 | 0 | 3 |
| CRJ | 205 | Correctional Law | 3 | 0 | 3 |
| | | | **14-15** | **2-3** | **15-16** |
| **SECOND YEAR** | | | | | |
| **Fall Semester** | | | | | |
| HIS | 130 or 131 | U.S. History I or II | 3 | 0 | 3 |
| — | — | Approved Social Science | 3 | 0 | 3 |
| CRJ | 125 | Criminal Law | 3 | 0 | 3 |
| CRJ | 212 | Criminal Procedure and Constitutional Law | 3 | 0 | 3 |
| CRJ | 235 | Corrections Administration | 3 | 0 | 3 |
| | | | **15** | **0** | **15** |
| **Spring Semester** | | | | | |
| ENG | 220 | Communicating About Ideas | 3 | 0 | 3 |
| — | — | Approved Social Science | 3 | 0 | 3 |
| — | — | Laboratory Science | 2-3 | 2-3 | 3-4 |
| CRJ | 240 | Community Corrections | 3 | 0 | 3 |
| CRJ | Elec. | Approved Criminal Justice Elective | 3 | 0 | 3 |
| | | | **14-15** | **2-3** | **15-16** |

**Total Credits: 61-63**

**Recommendations for Electives**
See electives under Criminal Justice

See notes under Criminal Justice for recommended courses and written emphasis course information.

# Criminal Justice-Police

### Associate in Applied Science

This program is designed for full-time students desiring employment after two years of study. Careful planning and selection of courses is necessary to complete the program in two years. Many students take advantage of summer terms to fill general education requirements. Consult the Criminal Justice Department Chair for specific details on selection of proper electives. Criminal Justice courses are described on page 128. Graduation from this program of study may now be completed at Broome Community College by completing all course requirements during the day. Required Criminal Justice courses also are taught in evenings to meet the needs of practitioners or others who cannot take classes during the day.

The program also is designed to meet the needs of students wishing to transfer to a four-year degree program upon graduation from Broome Community College.

Students entering Criminal Justice must understand that most law enforcement agencies have physical, psychological, and medical fitness standards, and require a background free of felony and serious misdemeanor convictions. In some cases, juvenile delinquency adjudications may exclude a person from employment in any level of law enforcement.

This course of study is not intended for prospective law school students.

SEQUENCE OF COURSES: This model is a two-year course schedule for students meeting all program requirements and deciding to pursue full-time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part-time study.

| FIRST YEAR | | Hours/Week | | Credits/Semester |
|---|---|---|---|---|
| **Fall Semester** | | Class | Lab | |
| ENG 110 | College Writing I | 3 | 0 | 3 |
| PSY 110 | General Psychology | 3 | 0 | 3 |
| MAT 113# | Math Explorations I | 3 | 0 | 3 |
| CRJ 101 | Introduction to Criminal Justice | 3 | 0 | 3 |
| CRJ 115 | Juvenile Justice | 3 | 0 | 3 |
| PED 118 | Personal Fitness | 0 | 2 | 1 |
| | | **15** | **2** | **16** |
| **Spring Semester** | | | | |
| ENG 111 | College Writing II | 3 | 0 | 3 |
| HIS 100 | Rise of the West | 3 | 0 | 3 |
| — — | Approved Laboratory Science | 2-3 | 2-3 | 3-4 |
| CRJ 125 | Criminal Law | 3 | 0 | 3 |
| CRJ 212 | Criminal Procedure and Constitutional Law | 3 | 0 | 3 |
| | | **14-15** | **2-3** | **15-16** |
| **SECOND YEAR** | | | | |
| **Fall Semester** | | | | |
| CRJ 245 | Criminology | 3 | 0 | 3 |
| CRJ 230 | Criminal Investigation | 3 | 3 | 4 |
| — — | Approved Social Science | 3 | 0 | 3 |
| — — | Humanities/Arts | 3 | 0 | 3 |
| HIS 130 or 131 | U.S. History I or II | 3 | 0 | 3 |
| | | **15** | **3** | **16** |
| **Spring Semester** | | | | |
| CRJ 215 | Police Administration | 3 | 0 | 3 |
| CRJ Elec. | Approved Criminal Justice Elective | 3 | 0 | 3 |
| CRJ Elec. | Approved Criminal Justice Elective | 3 | 0 | 3 |
| — — | Approved Social Science | 3 | 0 | 3 |
| ENG 220 | Communicating About Ideas | 3 | 0 | 3 |
| | | **15** | **0** | **15** |

**Total Credits: 62-63**

**Program supervised by:**

Gregory B. Talley
Criminal Justice Department Chair
Office: Titchener Hall, Room 210F
Telephone: 607 778-5192

**Curriculum Advisory Council: Criminal Justice**

CARL FENESCY / Broome County Security Director
DAVID HARDER / Broome County Sheriff
ROBERT KENT / NYS Office of Parole
ALEX MINOR / Binghamton Police Department
ROGER SHALLER / Binghamton Police Department
HON. MARTIN SMITH / Broome County Judge
STEPHEN VIZVARY / Security Consultant
RICHARD WAFFLE / NYS Park Police

**Recommendations for Electives**

CRJ 130, 205, 218, 225, 235, 240, 260; SPA 115; CHM 121; ART 112; ASL 120; BIO 131; COM 115, 150; ENG 150; PSY 214, 217, 223, 234; SPK 110

Recommended science courses are BIO 111, 112, 131, 132; CHM 120, 121; PHS 111, 112, 113, 114, 115, 116, 117, 125.

Two writing emphasis courses (w) are required after completing ENG 110 and at least one before enrolling in ENG 220.

#Mathematics courses are by placement test; students usually take MAT 113, 114, 124 or 136. (Developmental math may be necessary but is not creditable toward degree.) MAT 113 and MAT 114 meet graduation requirements for BCC. Students wishing to transfer to a four-year school are strongly encouraged to complete MAT 124 (Statistics) and/or MAT 136 (College Algebra and Trigonometry).

One credit of Physical Education is required. It must be chosen from among: PED 118, 119, 127, 135, 143, 144, 146, 147, 148, 155, 173.

**General Education Requirements:** See page 21.

# Dental Hygiene

### *Associate in Applied Science*

**Program supervised by:**

Maureen Mullins Hankin
Office: Decker Center, Room 217
Telephone: 607 778-5149
E-mail: hankin_m@sunybroome.edu

**Curriculum Advisory Council: Dental Hygiene**

DONALD BRONSKY, D.D.S. / Orthodontist
THOMAS W. BUCKER, D.D.S. / General Practice
EDWARD A. BUDNIKAS, D.M.D. / Orthodontist
KATHY CROWLEY, R.D.H.
CAROL FREIJE, R.D.H.
LISA LAPALLO, R.D.H.
ANTHONY C. PALOMBARO, D.D.S. / General Practice
SHELLY PURTELL, R.D.H.
IMAD TAMIMI, D.M.D. / Oral Surgery
NICK TIMKO, R.D.H.

The Dental Hygiene curriculum prepares students for contemporary practice of dental hygiene. Graduates are qualified to take written and practical licensure examinations for immediate employment. Students may transfer to a baccalaureate program for careers in public health, management, or education.

The department teaches all functions allowed by the New York State Practice Act. All are taught to clinical competency except the following which are taught to laboratory competency: removing sutures; placing and removing matrix bands and periodontal dressings; selecting and prefitting provisional crowns and orthopedic bands; removing orthodontic arch wires and ligature ties. These may require additional training in office practice.

Dental Hygiene graduates averaged $32,300 in 2000 ranging from $24,960 to $38,000.

The program in dental hygiene is accredited by the Commission on Dental Accreditation and has been granted the accreditation status of "approval without reporting requirements." The Commission is a specialized accrediting body recognized by the U.S. Department of Education.

SEQUENCE OF COURSES: This model is a two-year course schedule for students meeting all program requirements and deciding to pursue full-time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part-time study.

| FIRST YEAR | | | Hours/Week | | Credits/Semester |
|---|---|---|---|---|---|
| **Fall Semester** | | | Class | Lab | |
| BIO | 131 | Human Biology I | 3 | 2 | 4 |
| DEN | 101 | Dental Hygiene I | 2 | 8 | 4.5 |
| DEN | 103 | Oral Anatomy & Physiology | 2 | 3 | 3 |
| DEN | 108 | Infection Control in Dentistry | 1 | 0 | 1 |
| DEN | 109 | Ethical/Legal Considerations | 1 | 0 | 1 |
| ENG | 110 | College Writing I | 3 | 0 | 3 |
| | | | **12** | **13** | **16.5** |
| **Spring Semester** | | | | | |
| BIO | 132 | Human Biology II | 3 | 2 | 4 |
| BIO | 150 | Microbiology | 3 | 3 | 4 |
| DEN | 102 | Dental Hygiene II | 3 | 8 | 5.5 |
| DEN | 106 | Clinical Dental Radiography | 1 | 2 | 2 |
| DEN | 107 | Introduction to Periodontology | 1 | 0 | 1 |
| DEN | 110 | Dental Materials | 1 | 3 | 2 |
| | | | **12** | **18** | **18.5** |
| **SECOND YEAR** | | | | | |
| **Fall Semester** | | | | | |
| DEN | 201 | Dental Hygiene III | 2 | 12 | 6 |
| DEN | 204 | General & Oral Pathology | 3 | 0 | 3 |
| DEN | 205 | Periodontology | 2 | 0 | 2 |
| DEN | 206 | Dental Pharmacology | 2 | 0 | 2 |
| DEN | 209 | Dental Nutrition | 3 | 0 | 3 |
| PSY | 110w | General Psychology | 3 | 0 | 3 |
| | | | **15** | **12** | **19** |
| **Spring Semester** | | | | | |
| DEN | 202 | Dental Hygiene IV | 2 | 12 | 6 |
| DEN | 213 | Public Health | 2 | 2 | 3 |
| DEN | 214 | Current Topics in DH | 3 | 0 | 3 |
| ENG | 220 | Communicating About Ideas and Values | 3 | 0 | 3 |
| Social Science Civic Education Elective w | | | 3 | 0 | 3 |
| | | | **13** | **14** | **18** |

**GRADUATION REQUIREMENT: 72 CREDITS**

For important general information regarding Health Science curricula, see pages 11 and 23.

**NOTE:** Students must complete a Dental Hygiene Department Health Questionnaire, PPD Mantoux lab test, and be certified in CPR for Health Care Providers prior to admittance to Dental Hygiene I. Students must update annually.

# Dietary Manager

## Certificate Program

Students may earn a certificate from the Dietary Managers Association by completing the following courses:

| FIRST YEAR | | | CREDITS/SEMESTER |
|---|---|---|---|
| **Fall Semester** | | | |
| DIA | 101 | Nutrition | 3 |
| DIA | 103 | Dietary Management Field Experience I | 3 |
| BHM | 110 | Sanitation and Safety | 3 |
| DIA | 204 | Dietary Management Field Experience II | 3 |
| BHM | 216 | Quantity Food Production | 3 |
| BHM | 235 | Hotel and Restaurant Cost Control | 4 |
| BUS | 248 | Human Resource Management | 3 |
| | | | **22** |

Students earning a certificate in Dietary Manager may transfer all credit toward a degree in Hotel/Restaurant Management, and will earn the degree after completing 43-45 additional credits.

**Program supervised by:**

Jan Pitera
Office: Business Building, Room 108
Telephone: 607 778-5493
E-mail: pitera_j@sunybroome.edu

Rey C. Wojdat
Office: Business Building, Room B-106
Telephone: 607 778-5171
E-mail: wojdat_r@sunybroome.edu

**Curriculum Advisory Council:**

RONNIE DECOSSE, R.N. / QI Coordinator, River Meade

MARY ANN SWARTZ, M.S.R.D. / Food Service Director, Willow Point Nursing Facility

RAYMOND DENNISTON / Food Service Director, Johnson City CSD

TINA HASEMANN, M.S., R.D., C.D.N. / NY-PENN Nutrition Services, Inc.

MICHAEL J. MONAHAN, C.D.M. / Binghamton General Hospital

**NOTE:** There is a requirement for supervised work experience by a registered dietitian who acts as a preceptor to the student. All students entering the program are responsible for finding a preceptor, although every aid possible will be offered by the Department of Business.

**Program supervised by:**

Barbara Nilsen, Ed.D.
Teacher Education Department
Office: Titchener Hall, Room 210G
Telephone: 607 778-5029
Email: nilsen_b@sunybroome.edu

**Advisory Committee:**

TINA CARGILL, Broome County Head Start
NANCY SELIGA / BC Center Child Care Director
SUSAN MACLENNAN, Campus Preschool, Binghamton University
DARRELL R. NEWVINE / Executive Director / Broome County Child Development Council
MARY HAUST / Binghamton School District
ANN MARIE STONE / Director, BOCES Early Childhood Program
EMILIE KUDELA, Ph.D. / Assistant Professor, SUNY Cortland

# Early Childhood

## Associate in Applied Science

The Early Childhood program leads to an Associate in Applied Science degree and is designed to prepare graduates for immediate employment or to enhance the skills and advancement opportunities of those already employed.

ECE courses may meet DSS requirements for training and Child Development Associate (CDA) credentials. A certificate in Early Childhood may be awarded with successful completion of the first two semesters of coursework.

Teacher Certification transfer students should enroll as LAGS EDU.

Some early childhood courses may transfer for those seeking early childhood teacher certification. Verify with transfer institution.

SEQUENCE OF COURSES: This model is a two-year course schedule for students meeting all program requirements and deciding to pursue full-time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part-time study.

| FIRST YEAR | | | Hours/Week | | Credits/Semester |
|---|---|---|---|---|---|
| **Fall Semester** | | | Class | Lab | |
| ENG | 110 | College Writing I | 3 | 0 | 3 |
| PSY | 110 | General Psychology | 3 | 0 | 3 |
| ECE | 110 | Introduction to Early Education | 3 | 0 | 3 |
| HIS | 100, 131 or 132 | | 3 | 0 | 3 |
| ECE | 175 | Techniques of Observation | 3 | 0 | 3 |
| COL | 105[1] | Academic Planning Seminar | 1 | – | 1 |
| | | | **16** | **0** | **16** |
| **Spring Semester** | | | | | |
| ENG | 111 | College Writing II | 3 | 0 | 3 |
| PSY | 211w | Child Development | 3 | 0 | 3 |
| ECE | 120 | Curriculum Development | 3 | 0 | 3 |
| ECE | | Elective | 3 | 0 | 3 |
| MAT[2] | | Elective | 3 | 0 | 3 |
| | | | **15** | **0** | **15** |

Early Childhood students completing these courses may file for a certificate.
SCI may be substituted for MAT.

| SECOND YEAR | | | | | |
|---|---|---|---|---|---|
| **Fall Semester** | | | | | |
| ECE | 200w | Field Experience I | 2 | 4 | 4 |
| CIV | ED[3] | Civic Ed. Elective | 3 | 0 | 3 |
| SCI[4] | | Elective | 2-3 | 0-3 | 3-4 |
| ECE | | Elective | 3 | 0 | 3 |
| ART/HUM | | Elective | 3 | 0 | 3 |
| | | | **13-14** | **4-7** | **16-17** |
| **Spring Semester** | | | | | |
| ENG | 220 | Communicating About Ideas and Values | 3 | 0 | 3 |
| ECE | 201 | Field Experience II | 2 | 4 | 4 |
| PED | | | – | 2 | 1 |
| ECE | | Elective | 3 | 0 | 3 |
| ECE | | Elective or Related Elective[5] | 3 | 0 | 3 |
| | | | **11** | **6** | **15** |

**GRADUATION REQUIREMENTS: 62 CREDITS**

[1]Required for full time first semester freshmen

[2]Mathematics courses are by Placement Test: students usually take MAT 113, 114, 119, 120, 117, 124

[3]Civic Education courses must be from among: ECO 111, POS 201, 204, SOS 111/120, SOC 110, 111, CTP 275, HIS 131, 132 not taken for HIS requirement.

[4]Science courses may be: BIO 110, 112, 115, 120, 131, 132, PHS 111-117.

[5]Related elective may be another choice from: ARTS, HUMANITIES (SPK 110), CST, or ECE elective.

**General Education Requirements: See page 21.**

# Electrical Engineering Technology

### Associate in Applied Science

Electrical Engineering Technology emphasizes both the theory and the application of scientific and engineering methods, and prepares the student for immediate employment or for transfer to an upper division school upon graduation.

The graduate is prepared to be the intermediary between the design engineer and the skilled craftsman. EETs translate problems into solutions by building equipment using their knowledge of mathematics, physics, linear and digital electronics, microprocessor hardware and software, machines, robotics, process control, circuit analysis, and computer programming.

This program may require more than two years to complete if an entering student has not completed the admissions requirements for the program (pgs 12 and 13). Students lacking any of these courses may be required to take MAT096 Elementary Algebra and Trig., to prepare for MAT130 Applied Algebra and Trigonometry, and PHY090 Preparatory Physics.

The program is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (TAC/ABET).

SEQUENCE OF COURSES: This model is a two-year course schedule for students meeting all program requirements and deciding to pursue full-time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part-time study.

| FIRST YEAR | | | Hours/Week | | Credits/Semester |
|---|---|---|---|---|---|
| **Semester I** | | | Class | Lab | |
| CST | 106 | Computer Applications | 2 | 2 | 3 |
| EET | 111 | Electrical Construction Lab I | 1 | 3 | 2 |
| EET | 125 | DC Circuits & Lab | 2 | 2 | 3 |
| ENG | 110 | Written Expression | 3 | 0 | 3 |
| MAT | 130[1] | Applied Algebra and Trig | 4 | 0 | 4 |
| SOS | 111 | Public Policy | 3 | 0 | 3 |
| TEC | 100 | Introduction to Technology | 1 | 0 | .5 |
| | | | **16** | **7** | **18.5** |
| **Semester 2** | | | | | |
| CIV | 113 | Drawing with CAD | 1 | 3 | 2 |
| CST | 123 | Visual Basic for Technology | 2 | 2 | 3 |
| EET | 112 | Electrical Construction Lab II | 0 | 3 | 1 |
| EET | 126 | AC Circuits & Lab | 2 | 2 | 3 |
| EET | 150L | Electronics Devices Lab | 0 | 3 | 1 |
| EET | 150w | Electronic Devices | 3 | 0 | 3 |
| MAT | 160 | Applied Calculus | 4 | 0 | 4 |
| | | | **12** | **13** | **17** |
| **Semester 3** | | | | | |
| EET | 247L | Energy Conversion Lab | 0 | 3 | 1 |
| EET | 247w | Energy Conversion | 3 | 0 | 3 |
| EET | 251 | Electronics Circuitry | 3 | 0 | 3 |
| EET | 251L | Electronics Circuitry Lab | 0 | 3 | 1 |
| EET | 260 | Digital Logic & Lab | 2 | 2 | 3 |
| ENG | 150 | Technical Writing | 3 | 0 | 3 |
| PHY | 161 | Physics I | 3 | 0 | 3 |
| PHY | 161L | Physics I Lab | 0 | 3 | 1 |
| | | | **14** | **11** | **18** |
| **Semester 4** | | | | | |
| EET | 201 | Senior Seminar | 1 | 0 | 0 |
| EET | 230 | Design and Fabrication | 0 | 3 | 1 |
| EET | 252 | Electronic Systems | 3 | 0 | 3 |
| EET | 252L | Electronic Systems Lab | 0 | 3 | 1 |
| EET | 267 | Microprocessors & Lab | 2 | 2 | 3 |
| EET | 270 | Control Systems | 3 | 0 | 3 |
| EET | 270L | Control Systems Lab | 0 | 3 | 1 |
| PHY | 162 | Physics II | 3 | 0 | 3 |
| PHY | 162L | Physics II Lab | 0 | 3 | 1 |
| SS | ____ | Social Science Elective | 3 | 0 | 3 |
| | | | **15** | **14** | **19** |

**GRADUATION REQUIREMENT: 72-1/2 CREDITS**

**Program supervisor:**

WILLIAM H. MURRAY
Office: Applied Technology Building, Room 001
Telephone: 607 778-5017

**Curriculum Advisory Council: Electrical Engineering Technology**

ROBERT CLUNE / NYSEG
B.J. COONTZ / AMETEC Aerospace
GERRY HACKETT / Sanmina Corporation
CHARLES RANDALL / MacIntosh Labs
RUSSELL REID / NYSEG
DANIEL ARMSTRONG / Armstrong Telecommunications
JOHN URBAN / Photonix Technologies
GEORGE ROBINSON / NYSEG

**See also: Telecommunications Technology pg. 104**

[1]Students should consult with the department chairperson or designee to determine the appropriate mathematics course.

**Program supervisor:**
WILLIAM H. MURRAY
Office: Applied Technology Building, Room 001
Telephone: 607 778-5017

# Electrical Technology* (proposed program)

## Associate in Applied Science

Electrical Technology emphasizes both the theory and the application of scientific methods, and prepares the student for immediate employment.

The graduate is prepared to be the intermediary between the design engineer and the skilled craftsman. ETs translate problems into solutions by building equipment using their knowledge of mathematics, physics, linear and digital electronics, microprocessor hardware and software, machines, robotics, process control, circuit analysis, and computer programming.

This program may require more than two years to complete if an entering student has not completed the appropriate admissions requirements. Students lacking any of these courses may be required to take MAT096 Elementary Algebra and Trig., to prepare for MAT130 Applied Algebra and Trigonometry and PHY090 Preparatory Physics.

SEQUENCE OF COURSES: This model is a two-year course schedule for students meeting all program requirements and deciding to pursue full-time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part-time study.

| FIRST YEAR | | | Hours/Week | | Credits/Semester |
|---|---|---|---|---|---|
| **Semester I** | | | Class | Lab | |
| CST | 106 | Computer Applications | 2 | 2 | 3 |
| EET | 111 | Electrical Construction Lab I | 1 | 3 | 2 |
| EET | 125 | DC Circuits & Lab | 2 | 2 | 3 |
| ENG | 110 | Written Expression | 3 | 0 | 3 |
| MAT | 130 | Applied Algebra and Trigonometry | 4 | 0 | 4 |
| SOS | 111 | Public Policy | 3 | 0 | 3 |
| TEC | 100 | Introduction to Technology | 1 | 0 | .5 |
| | | | **16** | **7** | **18.5** |
| **Semester 2** | | | | | |
| CIV | 113 | Drawing with CAD | 1 | 3 | 2 |
| CST | 123 | Visual Basic for Technology | 2 | 2 | 3 |
| EET | 112 | Electrical Construction Lab II | 0 | 3 | 1 |
| EET | 126 | AC Circuits & Lab | 2 | 2 | 3 |
| EET | 150L | Electronics Devices Lab | 0 | 3 | 1 |
| EET | 150w | Electronic Devices | 3 | 0 | 3 |
| SPK | 110 | Efffective Speaking | 3 | 0 | 3 |
| | | | **11** | **13** | **16** |
| **Semester 3** | | | | | |
| EET | 247L | Energy Conversion Lab | 0 | 2 | 1 |
| EET | 247w | Energy Conversion | 3 | 0 | 3 |
| EET | 251 | Electronics Circuitry | 3 | 0 | 3 |
| EET | 251L | Electronics Circuitry Lab | 0 | 2 | 1 |
| EET | 260 | Digital Logic | 2 | 2 | 3 |
| ENG | 150 | Technical Writing | 3 | 0 | 3 |
| PHY | 161 | Physics I | 3 | 0 | 3 |
| PHY | 161L | Physics I Lab | 0 | 3 | 1 |
| | | | **14** | **9** | **18** |
| **Semester 4** | | | | | |
| EET | 201 | Senior Seminar | 1 | 0 | 0 |
| EET | 230 | Design and Fab | 0 | 3 | 1 |
| EET | 245 | Power Systems and Prog. Logic Controllers | 3 | 0 | 3 |
| EET | 245L | Power Systems and PLC Lab | 0 | 3 | 1 |
| EET | 267 | Microprocessors | 2 | 2 | 3 |
| EET | 280 | Communications Systems | 3 | 0 | 3 |
| EET | 280L | Communications Systems Laboratory | 0 | 3 | 1 |
| SS | ____ | Social Science Elective | 3 | 0 | 3 |
| | | | **12** | **11** | **15** |

**GRADUATION REQUIREMENT: 67-1/2 CREDITS**

**See also: Telecommunications Technology pg. 104**

*Pending Approval

[1]Students should consult with the department chairperson or designee to determine the appropriate mathematics course.

*ET graduates can elect to complete five additional courses: MAT 160 or 181, Physics 162 (with 162L lab), EET 252 (with 252L lab) and graduate with a second degree in Electrical Engineering Technology.

# Emergency Medical Technology/Paramedic

### Associate in Applied Science (AAS)

Broome Community College, in affiliation with Lourdes Hospital and United Health Services, offers a two-year AAS degree in Emergency Medical Technology/Paramedic. This rigorous program follows the new national standard curriculum released by the National Highway Safety Traffic Administration (NHTSA) in 1998. This curriculum represents the highest level of education in EMS prehospital training. Nationally, average starting paramedic salaries were $30,345 with an average top salary of $41,117 in 2002.

The program requires a minimum of 600 classroom hours, 560 hospital clinical hours and 440 hours of ambulance ride time broken in four phases. The minimum number of hours presumes that the student has completed an adequate number of acceptable ambulance calls in specific patient categories.

Clinical education, both in and out of hospital, represents the most important component of paramedic education since this is where the student learns to synthesize cognitive and psychomotor skills. Ambulance ride time allows the student to apply his/her knowledge in field situations under the supervision of a paramedic preceptor. The field internship is the fourth and final phase of the ambulance ride time and is when the student is evaluated by a senior preceptor. Students are eligible to take paramedic certification exams upon completion of the core paramedic curriculum.

Advanced standing is available for students who possess in-hospital or out of hospital advanced life support knowledge and skills. Advanced standing is typically only granted for portions of hospital clinical hours and ambulance ride time.

Other than BIO 131 and 132, other general education courses may be taken before, during or after the Core Paramedic courses. Given the very demanding nature of PMD 201, 202, 203 and 204 it is recommended that students pursuing the AAS degree complete general education requirements during their second fall and spring semesters.

## FIRST YEAR

**Core Paramedic Curriculum**

**Fall Semester**

| | | | |
|---|---|---|---|
| PMD | 201 | Paramedic I | 14 |
| BIO | 131 | Human Biology I | 4 |

**Spring Semester**

| | | | |
|---|---|---|---|
| PMD | 202 | Paramedic II | 14 |
| BIO | 132 | Human Biology II | 4 |

**Summer Semester**

| | | | |
|---|---|---|---|
| PMD | 203 | Paramedic III | 12 |

## SECOND YEAR

**Fall Semester**

| | | | |
|---|---|---|---|
| PMD | 204 | Paramedic IV | 5 |
| **Total Core Paramedic Curriculum Credits** | | | **53** |

Successful completion of core paramedic curriculum is required to be eligible to take the New York State and National Registry written and practical examinations.

**General Education Requirements**

| | | | |
|---|---|---|---|
| ENG | 110 | College Writing I | 3 |
| ENG | 220 | Communication about Ideas & Values | 3 |
| CST | 105 | Computer Applications or | 3 |
| | 106 | Computers in Technology | |
| MAT | 113 | Mathematical Explorations I or | 3 |
| | 114 | Mathematical Explorations II | |
| Elective | | Social Science or Civic Ed. w/writing emphasis | 3 |
| Elective | | Social Science or Civic Ed. w/writing emphasis | 3 |
| **Total General Education Credits** | | | **18** |

**GRADUATION REQUIREMENTS: 71 CREDITS**

**Program supervised by:**

Mary L. Rosato
Office: Decker Center, Room 217
Telephone: 607 778-5161
E-mail: rosato_m@sunybroome.edu

Paramedic Program Administrator
David Taggart, MHA, NREMT-P
Office: Decker Center, Room 317i
Telephone: 607 778-5387
E-mail: taggart_d@sunybroome.edu

**Curriculum Advisory Council: EMT - Paramedic**

| | |
|---|---|
| HALSEY BAGG | GLENN ROBERT |
| MARIA BERRY | DR. MICHAEL SCHRECK |
| KAY BOLAND | RAYMOND SEROWIK |
| BARBARA KIRBY | DAVID TAGGART |
| WILLIAM LOLLER | J. DAVID TINKLEPAUGH |
| DR. MARTIN MASARECH | DR. RICHARD WU |
| JULIA PEACOCK | |

**Prerequisites:**

Prior to admission into the paramedic program, the student must:

1. be currently certified as a basic EMT in New York State;
2. have a high school diploma or an equivalent;
3. submit a completed program application with high school and college transcripts;
4. submit two letters of recommendation;
5. successfully complete an interview with the program administrator and medical director;
6. take a basic EMT-level written and/or practical examination;
7. have a minimum of 1 year active EMS experience;
8. apply and be admitted to Broome Community College;
9. complete BIO 131/132 and College Writing I prior to or concurrently with beginning PMD classes.

**Admission to the College and finishing General Education requirements does not guarantee admissions into Paramedic Classes. Prerequisites must be met.**

**For important general information regarding Health Science curricula, see pages 11 and 23.**

**Program Supervised by:**
Thomas Grace
Office: Applied Technology Building, Room AT-101
Telephone: 607-778-5114
E-mail: grace_t@sunybroome.edu
www.sunybroome.edu/~egr_dept

# Engineering Science

## Associate in Science Transfer Program

This curriculum's strong emphasis on Engineering Design, Communication Skills, and Teamwork makes it easy for students to transfer as juniors to four-year engineering institutions across the country. Immediate employment opportunities also exist for graduates. Students in the program have co-op opportunities available at many local industries. Curriculum coursework requirements provide the student with a firm foundation in the areas of Physics, Chemistry, Mathematics, and Digital Electronics.

To facilitate student transfer, the College has joint, dual, and transfer admission agreements with many institutions including Binghamton University, Clarkson University, Cornell University, RIT, RPI, Wilkes University, and Buffalo University (SUNY). The Engineering Science department is a member of the Two Year Engineering Science Association which is affiliated with The Association of Engineering Colleges of New York State. Engineering Science students transfer primarily to Binghamton University Clarkson University, Rensselaer Polytechnic Institute, Rochester Institute of Technology, and Syracuse University. Most BCC ES graduates complete their BS within two years and either maintain or improve their GPA after transfer.

Design is an important component of the curriculum from the first semester. Many students choose to compete each year in statewide, regional, or national design competitions. Since 1990, these students have placed first or second in most competitions they have entered, including two 2nd Place awards at the 1998 ASEE National Freshman Design Competition.

If you wish to obtain Bachelor's degrees in Engineering, Applied Mathematics, Physics or Engineering Management programs you will find Engineering Science the most appropriate course of study. Success in completing this program depends more on determination, effort, and learning strategies than on ability and preparation. If your goal is to graduate with a BS in Engineering, this program will provide the background required to allow you to transfer with junior status. If proper preparatory mathematics or science courses have not been taken, or if placement information indicates a problem, students are advised to take courses which help assure success in this rigorous program of study. (Please see page 12 for specific requirements.)

SEQUENCE OF COURSES: The following model meets all program requirements for students who are pursuing full-time study and wish to complete the course work in four semesters. Those who desire a slower pace or need preparatory courses will require more than four semesters.

| FIRST YEAR | Hours/Week | | Credits/Semester |
|---|---|---|---|
| **Fall Semester** | Class | Lab | |
| EGR 150 Engineering Design I and Graphics | 1 | 3 | 2 |
| CHM 145 Chemistry I | 3 | 3 | 4 |
| MAT 181 Calculus I | 4 | 0 | 4 |
| PHY 181 Engineering Physics I | 3 | 3 | 4 |
| ENG 110/111 College Writing I/II | 3 | 0 | 3 |
| EGR 100 Engineering Orientation: Student Success I. | 0 | 2 | .5 |
| | **14** | **11** | **17.5** |
| **Spring Semester** | | | |
| EGR 151 Engineering Design II | 1 | 3 | 2 |
| Engineering Elective | 2/3 | 2/3 | 3 |
| MAT 182 Calculus II | 4 | 0 | 4 |
| PHY 182 Engineering Physics II | 3 | 3 | 4 |
| ENG 111/220 | 3 | 0 | 3 |
| EGR 101 Engineering Orientation: Student Success II | 0 | 2 | .5 |
| | **13/14** | **10/11** | **16.5** |
| **SECOND YEAR** | | | |
| **Fall Semester** | | | |
| EGR 289W Digital Logic and Microprocessors | 2 | 3 | 3 |
| EGR 287 Engineering Design III | 0 | 3 | 1 |
| Engineering Elective | 3 | 0 | 3 |
| MAT 282 Differential Equations and Linear Algebra | 4 | 0 | 4 |
| SOS 120 or Social Science elective | 3 | 0 | 3 |
| PED 155 or PED Electives | 1 | 4 | 2 |
| EGR 200 Engineering Orientation: Student Success III | 0 | 2 | .5 |
| | **13** | **12** | **16.5** |
| **Spring Semester** | | | |
| EGR 288 Engineering Design IV | 0 | 3 | 1 |
| Engineering Elective I | 3 | 0 | 3 |
| Engineering Elective II | 3 | 0 | 3 |
| Engineering Elective III | 3 | 0 | 3 |
| MAT 281 or Approved Mathematical Elective | 4 | 0 | 4 |
| Social Science Writing Emphasis Elective | 3 | 0 | 3 |
| EGR 201 Engineering Orientation: Student Success IV | 0 | 2 | .5 |
| | **16** | **5** | **17.5** |

**GRADUATION REQUIREMENTS: 68 CREDITS**

**Computer/Calculator Recommendation:**

Students will have to use a computer to analyze problems, make presentations, and write reports. A familiarity with word processing, spreadsheets, and powerpoint will be helpful, but is not required. Many assignments cannot be completed without a computer. While the College provides access to computers, it is not possible to provide enough machines or convenient times for everyone. Students are strongly urged to purchase a modern computer. Internet access and a modem are very useful. Students will also need a graphing calculator.

**Technical Elective**

Students may choose course work appropriate for their individual career path. Chemical Engineering majors usually take two semesters of Organic Chemistry, Biological or Environmental engineers usually take two semesters of Biology, and Computer Engineers prefer three semesters of programming classes. More traditional engineering fields usually take Statics, Dynamics and Circuits. Engineering Management options will require other substitutions. Social Science electives must include one writing emphasis course (indicated by a "W" in the course listing).

# Financial Services

## Associate in Applied Science

The Financial Services program combines business and financial courses leading to an Associate in Applied Science degree. The degree prepares the student for immediate employment in banks and other financial institutions. Selected courses provide prelicensing preparation for New York State or Federal licensing exams in Life, Accident, and Health Insurance, Real Estate for Salespersons and Securities Training (Series 6 and 63).

| FIRST YEAR | | | Hours/Week | | Credits/Semester |
|---|---|---|---|---|---|
| **Fall Semester** | | | Class | Lab | |
| BUS | 111 | Financial Accounting | 4 | 0 | 4 |
| BUS | 107 | Freshman Experience | 1 | 0 | 1 |
| BUS | 112 | Quantitative Business Methods | 3 | 0 | 3 |
| BUS | 118 | Business Law I | 3 | 0 | 3 |
| BUS | 141 | Marketing | 3 | 0 | 3 |
| ENG | 110[1] | College Writing I | 3 | 0 | 3 |
| | | | **17** | **0** | **17** |
| **Spring Semester** | | | | | |
| BUS | 210 | Managerial Accounting | 4 | 0 | 4 |
| BUS | 120w | Business Law II | 3 | 0 | 3 |
| BUS | 131 | Personal Finance | 3 | 0 | 3 |
| BNK | 168 | Principles of Banking | 3 | 0 | 3 |
| MAT | 113 | Math Explorations or higher MAT | 3 | 0 | 3 |
| | | | **16** | **0** | **16** |
| **SECOND YEAR** | | | | | |
| **Fall Semester** | | | | | |
| BUS | 135 | Investments | 3 | 0 | 3 |
| BUS | 172 | NYS Life, Accident, and Health | 2 | 0 | 2 |
| BUS | 152 | Selling Fundamentals | 3 | 0 | 3 |
| ECO | 110w | Microeconomics | 3 | 0 | 3 |
| SPK | 110 | Effective Speaking **or** Humanities Elective | 3 | 0 | 3 |
| — | — | Math **or** Science Elective | 3-4 | 0 | 3-4 |
| | | | **17-18** | **0** | **17-18** |
| **Spring Semester** | | | | | |
| BUS | 184 | Financial and Risk Management Practicum | 4 | 0 | 4 |
| BUS | 183 | Securities Training Series 6 & 63 | 3 | 1 | 3 |
| BNK | 184 | Banking/Real Estate/Mortgage Practicum | 4 | 0 | 4 |
| **OR** | | | | | |
| BUS | 163 | Real Estate for Salespersons | 2 | 1 | 2 |
| **OR** | | | | | |
| — | — | Banking **or** Business Elective | 3 | 0 | 3 |
| — | — | [2]An advisor-approved computer elective (Choose from list below) | 3 | 0 | 3 |
| ECO | 111 | Macroeconomics | 3 | 0 | 3 |
| ENG | | Advisor approved ENG course | 3 | 0 | 3 |
| | | | **18-20** | **2** | **18-20** |

**Total Credits: 68-71**

[1]or ENG 111, based on placement test.

[2]BUS 181 - The Internet with Business Applications: CST 105 - Computer Applications; CST 158 - Spreadsheets with Financial Applications; or Advisor approved CST course; or Approved BIT courses.

Students should check with their advisors during the scheduling process to make sure courses are taken in proper sequence and any prerequisites have been met. Some flexibility is available as to when courses must be taken, but not all courses are offered every semester.

**Program supervised by:**

Jan Pitera
Office: Business Building, Room 108
Telephone: 607 778-5493
E-mail: pitera_j@sunybroome.edu

Glen R. Wood
Office: Business Building, Room B-216A
Telephone: 607 778-5300
E-mail: wood_g@sunybroome.edu

**Curriculum Advisory Council: General Business**

Membership of the Business Department Advisory Council consists of representatives from area organizations. The Committee members are selected to serve on a rotating basis and are selected annually with some members remaining on the council for multiple terms.

# Fire Protection Technology

## Associate in Applied Science

### For Part-Time Students

The Fire Protection Technology Program is designed to provide fire fighters and related fire service personnel with specialized training. The curriculum has been developed by a local advisory committee to meet the needs of the area, and specialized courses as well as general education courses constitute the degree program. Specialized courses include Fire Fighter Tactics and Strategy, Arson Investigation, Hydraulics, Hazardous Materials, Fire Prevention, and Building Construction.

This program is open to both paid and volunteer fire fighters of the community, as well as those persons in related firematic areas.

SUGGESTED SEQUENCE FOR FULL-TIME STUDENTS: Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed.

| FIRST YEAR | | Hours/Week Class | Lab | Credits/Semester |
|---|---|---|---|---|
| **Fall Semester** | | | | |
| ENG 110 | College Writing I | 3 | 0 | 3 |
| MAT 113# | Math Explorations I | 3 | 0 | 3 |
| PSY 110 | General Psychology | 3 | 0 | 3 |
| FRS Elec. | Approved FRS Elective | 3 | 0 | 3 |
| FRS Elec. | Approved FRS Elective | 3 | 0 | 3 |
| PED 118 | Personal Fitness | 0 | 2 | 1 |
| | | **15** | **2** | **16** |
| **Spring Semester** | | | | |
| ENG 111 | College Writing II | 3 | 0 | 3 |
| — — | Approved Lab Science | 2-3 | 2-3 | 3-4 |
| HIS 100 | Rise of the West | 3 | 0 | 3 |
| FRS Elec. | Approved FRS Elective | 3 | 0 | 3 |
| FRS Elec. | Approved FRS Elective | 3 | 0 | 3 |
| | | **14-15** | **2-3** | **15-16** |
| **SECOND YEAR** | | | | |
| **Fall Semester** | | | | |
| HIS 130 or 131 | U.S. History I or II | 3 | 0 | 3 |
| — — | Approved Social Science/Civic Educ. | 3 | 0 | 3 |
| FRS Elec. | Approved FRS Elective | 3 | 0 | 3 |
| FRS Elec. | Approved FRS Elective | 3 | 0 | 3 |
| FRS Elec. | Approved FRS Elective | 3 | 0 | 3 |
| | | **15** | **0** | **15** |
| **Spring Semester** | | | | |
| ENG 220 | Communicating About Ideas/Values | 3 | 0 | 3 |
| — — | Approved Social Science | 3 | 0 | 3 |
| — — | Approved Laboratory Science | 2-3 | 2-3 | 3-4 |
| FRS Elec. | Approved FRS Elective | 3 | 0 | 3 |
| FRS Elec. | Approved FRS Elective | 3 | 0 | 3 |
| | | **14-15** | **2-3** | **15-16** |

**Total Credits: 61-63**

**Program supervised by:**

Gregory B. Talley
Office: Titchener Hall, Room 210F
Telephone: 607 778-5192

**Curriculum Advisory Council: Fire Protection Technology**

STEPHEN ANDREW / BCC Coordinator, Endicott Fire Chief
MICHAEL ASWAD / County Fire Coordinator and Director of Emergency Services
DONALD COLLINS / Endicott Fire Department
THOMAS GEISENHOF / Codes Officer - Owego/Student Representative
MICHAEL HEIDE / Endicott Fire Department
STEPHEN HRUSTICH / Endicott Fire Department
JOHN KRATCHOVIL / IBM Endicott Fire Officer
GEORGE MANEY / Fire Chief - Johnson City
DAVID RICKARD / Chief - Five Mile Point Fire Company
JAMES RYAN / NYS Fire Academy, Montour Falls
GEORGE SELTZER / President - Broome County Chiefs Assoc.
HARRY SMITH / Binghamton Fire Department
THOMAS VROMAN / Broome County Arson Task Force and Endicott Fire Department
MICHAEL WASHINGTON / Binghamton Fire Department
RICHARD WASHINGTON / Binghamton Fire Department

**NOTE:** Students must fulfill General Education Requirements. See page 21. **[Courses taken at the New York State Fire Academy at Montour Falls will be reviewed for credit on an individual basis using the credit by exam policy.]**

**Recommended Electives**
Chemistry: Suggest CHM 120 or CHM 121
Mathematics: Suggest MAT 136 (4 Credits) 124, 117 or as dictated by placement test.
Social Sciences: Choose from History, Anthropology, Sociology, Psychology, Political Science, Economics. One course must be from the following: SOC 111, HIS 130/131, HIS 187, POS 201, 204, SOS 111/120, 130, ECO 110/111.
Fire Protection Courses: Select from FRS 101, FRS 103, FRS 105, FRS 107, FRS 108, FRS 110, FRS 200, FRS 201, FRS 204, FRS 205*, FRS 250, FRS 299.
Management: Suggest BUS 245, 246, 248, 110, 118, 141, 249, 150.

Electives: Courses with FRS, MAT designators, CHM 121, or other courses with permission.

w - Writing Emphasis Course: Two are required after ENG 110 and before ENG 220

Fire Protection courses are offered on a rotation system. Each course is usually offered once every three semesters.

#MAT 113 and MAT 114 meet graduation requirements for BCC. Students wishing to transfer to a four-year school are strongly encoursged to complete MAT 124, Statistics, or MAT 136, College Algebra and Trigonometry.

# Health Information Technology

### Associate in Applied Science

A medical record is the permanent report of a person's illness or injury kept to preserve information of medical, scientific and legal value. The record includes all medical reports which describe how the patient's illness was diagnosed and treated. Medical records are needed to help doctors diagnose and treat future illness, to verify insurance claims, to plan hospitals, to inform the public health officials, and to aid researchers.

The health information technician works in the health information department of a hospital, clinic, nursing home, school of veterinary medicine or other health facility, and is responsible for many aspects of preparing, analyzing and preserving health information needed by the patients, by the hospital, and by the public. The duties include reviewing medical records for completeness and accuracy and also translating diseases and operations into the proper coding symbols.

The health information technician is involved in patient billing and reimbursement as a coding specialist. Other duties include compiling statistics of many kinds, assisting the medical staff by preparing special studies and tabulating data from records for research. Supervising the day-to-day operation of a health information department, taking records to court and maintaining the flow of the total work picture.

Practice in the college health information laboratory as well as in medical records departments of cooperating hospitals and other health care facilities, either within or outside the area, provides opportunities for additional educational experience which is the vital core of the program.

Students who graduate from the program are eligible to take the National Certification Examination to become a Registered Health Information Technician (RHIT). Graduates can continue health information management education toward a baccalaureate degree at four-year colleges.

Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part time study.

| FIRST YEAR | | | Hours/Week | | Credits/Semester |
|---|---|---|---|---|---|
| **Fall Semester** | | | Class | Lab | |
| BIO | 131 | Human Biology I | 3 | 2 | 4 |
| ENG | 110 | College Writing I | 3 | 0 | 3 |
| HIT | 101 | Intro. to Health Information Systems | 3 | 2 | 4 |
| HIT | 106 | Medical Terminology | 3 | 0 | 3 |
| CST | 105 | Computer Applications | 2 | 2 | 3 |
| | | | **14** | **6** | **17** |
| **Spring Semester** | | | | | |
| BIO | 132 | Human Biology II | 3 | 2 | 4 |
| HIT | 222W | Medical Legal Aspects | 3 | 0 | 3 |
| HIT | 116 | Health Care Statistics | 2 | 2 | 3 |
| — | — | Social Science Electives | 6 | 0 | 6 |
| — | — | (Civic Elective (1W)) | | | |
| MDA | 210 | Pharmacology | 2 | 0 | 2 |
| | | | **16** | **4** | **18** |
| **SECOND YEAR** | | | | | |
| **Fall Semester** | | | | | |
| BIO | 140 | Pathophysiology | 3 | 0 | 3 |
| HIT | 203 | Computers in Health Care | 3 | 0 | 3 |
| ENG | 220 | Communicating About Ideas and Values | 3 | 0 | 3 |
| HIT | 204 | Inpatient Coding System | 3 | 3 | 4 |
| HIT | 236 | Quality Improvement | 2 | 2 | 3 |
| HIT | 144[2] | Clinical Affiliation I | 0 | 0 | 2 |
| HIT | 205 | Coding Practicum | 0 | 0 | 2 |
| | | | **14** | **5** | **20** |
| **Spring Semester** | | | | | |
| HIT | 210 | Management Principles for HIT | 2 | 2 | 3 |
| HIT | 295 | Health Information Seminar | 2 | 0 | 2 |
| HIT | 245[2] | Clinical Affiliation II | 0 | 0 | 6 |
| HIT | 214 | Ambulatory Care Coding | 2 | 2 | 3 |
| HIT | 220 | Survey of Healthcare Delivery | 2 | 0 | 2 |
| | | | **8** | **4** | **16** |

**GRADUATION REQUIREMENTS: 71 CREDITS**

**Program supervised by:**

Mary Rosato
Office: Decker Center, Room 217
Telephone: 607 778-5051
E-mail: rosato_m@sunybroome.edu

**Curriculum Advisory Council: Health Information Technology**

ROSE CANTONESE, RHIT
Director of Health Information, The Waters

DEBORAH SMITH, RHIT
Director of Health Information, The Hospital

SANDRA THOMPSON, RHIA
Director of Health Information
Our Lady of Lourdes Hospital

PHYLLIS TITLE
Director of Health Information
Ideal Long Term Home Health

LORRAINE WENIG, RHIA
Director of Health Information
Broome Developmental Center
Adjunct Instructor

[1]Students who have completed HIT 204 Inpatient Coding System and HIT 214 Ambulatory Care Coding may elect to take HIT 260 Advanced Coding and HIT 250 Medical Insurance Billing to earn a proficiency award in Coding and Reimbursement.

[2]HIT 144 requires 60 clinical hours over 10 weeks; HIT 245 is conducted in a six-week block time frame. Students will be in a participating facility 5 days a week/8 hours a day.

Suggested Elective(s):
HIT 107 Medical Transcription, BIT Word Processing/Keyboarding.

**For important general information regarding Health Science curricula, see pages 11 and 23.**

**Program supervised by:**
Mary L. Rosato
Office: Decker Center, Room 217
Telephone: 607 778-5051
Email: rosato_m@sunybroome.edu

# Health Sciences: Individual Studies

Individual Studies: Health Sciences provides opportunities for students interested in achieving entry-level competencies in various Health Careers. By structuring appropriate areas of concentration, with the aid of an academic advisor, students may build the qualifications and skills needed for competence in today's multiskilled health care environment.

## Associate in Science Degree (60 credits)

- 30 credits in student's area of concentration (HST 100 required)
- 30 credits in English, Humanities, Natural Science, Mathematics, Social Science, and Physical Education
  To include:
  9 credits of Humanities
  6 credits of Social Sciences (3 civic education)
  8 credits of Laboratory Science (Bio 131/132 required)

## Associate in Applied Science (60 credits)

- 10 credits in Technical Electives
- 27 credits in student's area of concentration (HST 100 required)
- 20 credits in Humanities, Social Sciences, Mathematics, Natural Sciences
  To include:
  6 credits in English
  6 credits in Social Sciences (3 civic education)
  3 credits Math
  8 credits Natural Sciences (Bio 131/132 required)

---

The Health Science Division offers certificate programs and individual courses, which can fit within an Individual Studies degree. All of these courses of study lead to a technical skill/competency. Many of the courses are also applicable to Health Science degree programs.

### SHORT TERM PROGRAMS AVAILABLE WITHIN INDIVIDUAL STUDIES

Medical Transcription – see page 95

Phlebotomy – see page 101

Coding and Reimbursement – see Program Supervisor

**Individual Courses**

The following individual courses prepare students for immediate employment in entry-level health care positions.

- EMT 110 Basic Emergency Medical Technician (8 credits)
- HST 110 Personal Care Aide (5 credits)
- HST 111 Home Health Aide (2 credits)

**Looking for an Elective in the Health Sciences?**

- HIT 106* Medical Terminology (3 credits)
- ADN 112 Holistic Health (2 credits)
- ADN 116 Humor and Healthy Living (1 credit)
- MLT 110* Introduction to Medical Laboratory Technology (1 credit)
- MLT 204* Fundamental Phlebotomy (1 credit)
- MDA 208 Medical Ethics, Law and Economics (3 credits)
- MDA 210* Pharmacology (2 credits)
- HIT 222* Medical Legal Aspects (3 credits)

**On-Line sections may be available*

# Hotel Restaurant Management

### *Associate in Applied Science*

The Hotel/Restaurant Management program is a planned sequence of college level courses leading to the Associate in Applied Science degree. Hotel/Restaurant Management emphasizes business theory and application of industry-specific methods to prepare the student for immediate employment; however, some students decide to transfer to an upper division school.

Graduates of the Hotel/Restaurant Management program are employed in a variety of positions within food and hotel facilities, both in the local area and worldwide. Their responsibilities vary depending upon the position. Graduates have found opportunities in hotel front office management, food and beverage management, and sales and marketing.

The program may require more than two years to complete depending on a student's academic background. The department will tailor a program assuring each student the opportunity to earn the A.A.S. degree in Hotel/Restaurant Management.

| FIRST YEAR | | Hours/Week | | Credits/Semester |
|---|---|---|---|---|
| **Fall Semester** | | Class | Lab | |
| BUS 108 | Accounting for a Service Business | 4 | 0 | 4 |
| BUS 107 | Freshman Experience | 1 | 0 | 1 |
| BUS 112[1] | Quantitative Business Methods | 3 | 0 | 3 |
| BUS 118 | Business Law I | 3 | 0 | 3 |
| BUS 141 | Marketing | 3 | 0 | 3 |
| ENG 110[5] | College Writing I | 3 | 0 | 3 |
| | | **17** | **0** | **17** |
| **Spring Semester** | | | | |
| BHM 110[2] | Sanitation and Safety | 3 | 0 | 3 |
| BHM 125w[2] | Hospitality Law | 3 | 0 | 3 |
| BUS 229 | Advertising | 4 | 0 | 4 |
| **OR** | | | | |
| BUS 152 | Selling Fundamentals | 3 | 0 | 3 |
| BHM 235[2] | Hotel / Restaurant Cost Control | 4 | 0 | 4 |
| — — | [4]An advisor-approved computer elective (Choose from list below) | 3 | 0 | 3 |
| | | **16-17** | **0** | **16-17** |
| **SECOND YEAR** | | | | |
| **Fall Semester** | | | | |
| BHM 201[3] | Hotel/Restaurant Internship I | 3 | 0 | 3 |
| BHM 216[2] | Quantity Food Production | 1 | 6 | 3 |
| BHM 230[2] | Front Office Operations Mgmt. | 4 | 0 | 4 |
| Math/Science Elective | | 4 | 0 | 4 |
| BUS 248 | Human Resource Management | 3 | 0 | 3 |
| | | **14** | **6** | **17** |
| **Spring Semester** | | | | |
| BHM 270[2] | Hospitality Managerial Accounting | 3 | 0 | 3 |
| BHM 297[3] | Hotel/Restaurant Internship II | 3 | 0 | 3 |
| ECO 110w | Microeconomics | 3 | 0 | 3 |
| Social Science Elective | | 3 | 0 | 3 |
| ENG | Advisor approved ENG elective | 3 | 0 | 3 |
| — —[4] | Math/Science Elective | 4 | 0 | 4 |
| | | **19** | **0** | **19** |

**Total Credits: 67-68**

**Program supervised by:**

Jan Pitera
Office: Business Building, Room 108
Telephone: 607 778-5133
E-mail: pitera_j@sunybroome.edu

Rey C. Wojdat
Office: Business Building, Room B-106
Telephone: 607 778-5171
E-mail: wojdat_r@sunybroome.edu

**Curriculum Advisory Council: Hotel/Restaurant Management**

GREGORY G. MCGUIRE, FMP / General Manager, Binghamton Club

STEPHEN J. LUPO / Partner, Lupo's S&S Char Pit

SUZANNE HARTRICK / Director of Sales and Marketing, Romolo's Banquets & Catering

[1]Depending on Mathematics entrance testing scores and math background, the student will take: MAT 090 and QBM or QBM or Introduction to Business.

[2]Take these courses in the semester (fall or spring) indicated. They are not offered in all semesters.

[3]Internships may be taken and/or completed during the summer.

[4]CST 105 or 158, BUS 181, or three approved BIT 1.0 credit modules.

[5]or ENG 111, based on placement test.

**Program supervised by:**
Margherita Rossi
Office: Titchener, Room T-210D
Telephone: 607 778-5216
E-mail: rossi_m@sunybroome.edu

# Human Services

## Associate in Science

Major changes in society have resulted in a need for human service professionals. Advancing technology, an aging population, economic factors, significant changes in the character and structure of the family, and other social trends contribute to this need. Human Services is a challenging career field that provides the opportunity for personal satisfaction through helping others.

The Human Services Program is designed for students interested in transferring to four-year institutions to earn a baccalaureate degree in the area of human services, counseling, or social work, and for students preparing for careers as paraprofessionals in educational and human services agencies upon completion of the Associate in Science degree. The program will also be useful for students currently employed in paraprofessional positions within human service agencies interested in continuing education.

The internship segment of the curriculum is an integral part of the student's learning process as it gives the student an opportunity to experience human services work and apply basic theoretical knowledge and helping skills covered in courses. Internships are available in a wide variety of health, human service, and school settings.

**See also:**
**Chemical Dependency Counseling pg. 50**

| FIRST YEAR | Hours/Week | | Credits/Semester |
|---|---|---|---|
| **Fall Semester** | Class | Lab | |
| ENG 110 College Writing I | 3 | 0 | 3 |
| HIS 130/131 U.S. History I or II | 3 | 0 | 3 |
| PSY 110 General Psychology | 3 | 0 | 3 |
| SOC 110 Intro. to Sociology | 3 | 0 | 3 |
| Laboratory Science (BIO 131 recommended) | 3 | 2 | 4 |
| | **15** | **2** | **16** |
| **Spring Semester** | | | |
| ENG 111 or LIT Elective | 3 | 0 | 3 |
| MAT ___ Elective | 3-4 | 0 | 3-4 |
| Humanities Elective (LIT, PHI, Foreign Language) | 3 | 0 | 3 |
| PED Phys. Ed. Elective | 0 | 2 | 1 |
| Laboratory Science (BIO 132 recommended) | 3 | 2 | 4 |
| — — Arts (Art, Music Theatre) | 3 | 0 | 3 |
| | **15-16** | **2** | **17-18** |
| **SECOND YEAR** | | | |
| **Fall Semester** | | | |
| MAT ___ Elective | 3 | 0 | 3 |
| PSY 214 Abnormal Psychology | 3 | 0 | 3 |
| PSY 217 Counseling and Interviewing | 3 | 0 | 3 |
| PSY 223 Human Exceptionality and Its Assessment | 3 | 0 | 3 |
| PSY 227 Behavior Modification | 3 | 0 | 3 |
| | **15** | **0** | **15** |
| **Spring Semester** | | | |
| SOS 111 Public Policy | 3 | 0 | 3 |
| **OR** | | | |
| POS 201 American Government | 3 | 0 | 3 |
| SOC 250 Introduction to Social Work | 3 | 0 | 3 |
| HMS 250 Human Service Organizations | 3 | 0 | 3 |
| HMS 290[1] Human Service Field Experience | 1 | 6 | 4 |
| ENG 220 Communicating About Ideas and Values | 3 | 0 | 3 |
| | **15** | **6** | **16** |

**GRADUATION REQUIREMENTS: 64-65 CREDITS**

w - Students must take two Writing Emphasis ("W") courses after ENG 110 and before ENG 220.

[1]Registration predicated on number of internships available each Spring semester.

# Human Services: Sequence in Gerontology

**Program supervised by:**
Margherita Rossi
Office: Titchener, Room T-210D
Telephone: 607 778-5216
E-mail: rossi_m@sunybroome.edu

### Associate in Science

The Gerontology sequence of the Human Services degree program will provide students with specialized knowledge of the aging process and gerontolgical issues that will help them understand and serve older adults. It is designed especially for those who are interested in focusing on older adults in their work or future career. Each student is required to do an internship which provides the opportunity to apply what they have learned to a work experience.

Selection of this sequence prepares students for careers in occupations that involve adults as they age. Non-profit, county, and state agencies, social services related to health care, nursing homes, retirement communities, and adult day care are all possible locations where students may work. The program is excellent preparation for transfer to a baccalaureate degree program in gerontology, human services, social work, counseling, or public health.

| FIRST YEAR | | | Hours/Week | | Credits/Semester |
|---|---|---|---|---|---|
| **Fall Semester** | | | Class | Lab | |
| ENG | 110 | College Writing I or ENG 111 College Writing II | 3 | 0 | 3 |
| PSY | 110 | General Psychology | 3 | 0 | 3 |
| BIO | 131 | Human Biology I | 3 | 2 | 4 |
| SOC | 110 | Intro. to Sociology | 3 | 0 | 3 |
| HMS | 146 | Intro. to Gerontology | 3 | 0 | 3 |
| | | | **15** | **2** | **16** |
| **Spring Semester** | | | | | |
| PSY | 210 | Human Development | 3 | 0 | 3 |
| PSY | 214 | Abnormal Psychology | 3 | 0 | 3 |
| BIO | 132 | Human Biology II | 3 | 2 | 4 |
| PSY | 217 | Counseling and Interviewing | 3 | 0 | 3 |
| ANT | 111 | Cultural Anthropology | 3 | 0 | 3 |
| | | | **15** | **2** | **16** |
| **SECOND YEAR** | | | | | |
| **Fall Semester** | | | | | |
| HMS | 147 | Eldercare Internship and Seminar | 3 | 4 | 3 |
| HMS | 240 | Perspectives on Death and Dying | 3 | 0 | 3 |
| SOS | 111 | Public Policy | 3 | 0 | 3 |
| SOS | 250 | Intro. to Social Work | 3 | 0 | 3 |
| | — | ARTS (Art, Music, Theatre) | 3 | 0 | 3 |
| PED | 150 | Personal Nutrition | 0 | 2 | 1 |
| | | | **15** | **6** | **16** |
| **Spring Semester** | | | | | |
| MAT | | Elective | 3 | 0 | 3 |
| PSY | 245 | Social Psychology | 3 | 0 | 3 |
| HMS | 260 | Special Topics on Aging | 3 | 0 | 3 |
| ENG | 220 | Communicating About Ideas and Values | 3 | 0 | 3 |
| PHI | 201 | Ethics | 3 | 0 | 3 |
| | | | **15** | **0** | **15** |

**GRADUATION REQUIREMENTS: 63 CREDITS**

w - Students must take two Writing Emphasis ("W") courses after ENG 110 and before ENG 220.

[1]Industrial Technology certificate programs are available in Civil/Construction/CAD and Mechanical/CADCAM. See page 71.

# Industrial Technology

### Associate in Applied Science[1]

The Industrial Technology curriculum provides an educational opportunity for those students who desire an associate degree in a technical area with a non-calculus mathematics approach. The curriculum provides a general technology program which allows students a choice of course selections in several technical specialties. Designed for the part-time degree candidate, individualized program design may be developed by an appropriate advisor, to meet the needs of a student, or by an advisor with a corporate sponsor.

A minimum of 60 semester hours is required for the A.A.S. degree. A Certificate of Industrial Technology may be granted upon completion of 30 approved credits. Individualized programs which vary from the suggested sequences must be approved by the Dean of Applied Sciences or the appropriate academic advisor.

| Suggested Core Courses | Credits |
|---|---|
| MAT 124 or MAT 125 Statistics I | 3 |
| MAT 150 College Technical Mathematics | 4 |
| CST 106 Computers in Technology | 3 |
| ENG 110 College Writing I | 3 |
| ENG 150 Technical Writing | 3 |
| SOS 120 Science, Technology and Democratic Society | 3 |
| Social Science Elective Approval by Advisor | 3 |
| PHY 161 and 162 or CHM 145 and 146 | 8 |
| **Total** | **30** |

The additional 30 credits of approved coursework required for the AAS degree may be taken in the suggested sequence below:

# Industrial Technology: Mechanical/CADCAM

### Associate in Applied Science

The Mechanical/CADCAM sequence of the Industrial Technology program is designed for the full-time day or part-time evening student. This program prepares students with the knowledge and skills in Computer Aided Drawing (CAD), Computer Aided Manufacturing (CAM), and Quality Assurance to assure success in today's high-tech industries.

The following sequence of courses is a two-year schedule for full-time day students meeting all prerequisites. Schedules will be redesigned for students without the prerequisites and for part-time students.

| FIRST YEAR | Hours/Week | | Credits/Semester |
|---|---|---|---|
| **Fall Semester** | Class | Lab | |
| CST 106 Computers in Technology | 2 | 2 | 3 |
| MAT 130 Applied Algebra & Trigonometry | 4 | 0 | 4 |
| MET 113 Engineering Drawing I w/CAD | 1 | 3 | 2 |
| TEC 100 Introduction to Technology | 0 | 1 | .5 |
| MET 121 Manufacturing Processes I | 1 | 3 | 2 |
| MET 112 Metrology | 3 | 0 | 3 |
| | **11** | **9** | **14.5** |
| **Spring Semester** | | | |
| MET 122 Manufacturing Processes II | 2 | 3 | 3 |
| ENG 110 College Writing | 3 | 0 | 3 |
| MET 116 Engineering Drawing II w/CAD | 2 | 3 | 3 |
| MAT 124 Statistics | 3 | 1 | 3 |
| Technical Elective[1] | + | + | 3 |
| | **10+** | **7+** | **15** |
| **SECOND YEAR** | | | |
| **Fall Semester** | | | |
| MET 220[2] Programming CNC Machine Tools | 2 | 2 | 3 |
| MET 211 Basic Mechanical CAD | 1 | 2 | 2 |
| ENG 150 Technical Writing | 3 | 0 | 3 |
| SOS 120w Science, Tech. & Democratic Soc. | 3 | 0 | 3 |
| PHY 161 Physics I | 3 | 3 | 4 |
| | **12** | **7** | **15** |
| **Spring Semester** | | | |
| MET 223[2] Computer Integrated Machining | 2 | 2 | 3 |
| MET 213 Advanced Mechanical CAD | 1 | 2 | 2 |
| MET 164 Quality Systems | 1 | 3 | 2 |
| PHY 162 Physics II | 3 | 3 | 4 |
| Social Science Elective | 3 | 0 | 3 |
| Technical Elective[1] | + | + | 2 |
| | **10+** | **10+** | **16** |

**GRADUATION REQUIREMENTS: 60.5 CREDITS**

**Program supervised by:**
John Petrewski, Chairman
Office: Mechanical Building, Room M117
Telephone: 607 778-5023
E-mail: petrewski_j@sunybroome.edu

[1]Technical Electives may be chosen from CST, EET, CHM, CIV, MET, or SQC listings.

[2]Offered in the evening only.

**NOTE: Some course substitutions are available for evening students.**

# Industrial Technology

### Preapproved Certificate Programs

A student or corporation interested in a certificate in Industrial Technology can complete up to 30 approved credits in an Industrial Technology-Associate in Applied Sciences degree program. In special circumstances, students and designated advisors can custom design Industrial Technology certificate programs to meet individual needs. Another option is to select one of the following pre-approved certificate programs.

## Civil/Construction/CAD

**Program supervised by:**
Kelli Ligeikis, P.E.
Office: Mechancial Building, Room 117
Telephone: 607 778-5010
E-mail: ligeikis_k@sunybroome.edu

| Courses | | Credits |
|---|---|---|
| MAT 130 | Applied Algebra and Trigonometry | 4 |
| CST 106 | Computers in Technology | 3 |
| CIV 113 | Engineering Drawing I w/CAD | 2 |
| CIV 114 | Civil Drafting w/CAD | 2 |
| CIV 136 | Construction Methods & Management | 3 |
| CIV 119 | Architectural Drafting w/CAD | 2 |
| CIV 231 | Estimating and Construction Planning | 2 |
| CIV 238 | Arch. Design & Bldg. Materials w/CAD | 3 |
| CIV 217 | Materials Testing | 3 |
| Technical Electives | | 6 |
| **Total** | | **30** |

## Mechanical/CADCAM

**Program supervised by:**
John Petrewski
Office: Mechanical Building, Room 117
Telephone: 607 778-5023
E-mail: petrewski_j@sunybroome.edu

| Courses | | Credits |
|---|---|---|
| MAT 130 | Applied Algebra and Trigonometry | 4 |
| CST 106 | Computers in Technology | 3 |
| MET 112 | Metrology | 3 |
| MET 113 | Engineering Drawing I w/CAD | 2 |
| MET 116 | Engineering Drawing II w/CAD | 3 |
| MET 121 | Manufacturing Processes I | 2 |
| MET 122 | Manufacturing Processes II | 3 |
| MET 211 | Basic Mechanical CAD | 2 |
| MET 223 | Computer Integrated Machining | 3 |
| MET 220 | Programming CNC Machine Tools | 3 |
| Technical Electives | | 2 |
| **Total** | | **30** |

**Program supervised by:**

Mary Woestman
Office: Applied Technology Building, Room 018
Telephone: 607 778-5165
E-mail: woestman_m@sunybroome.edu

**Curriculum Advisory Council: Quality Assurance**

FRAN ANDERSON / Our Lady of Lourdes Hospital
OWEN CHRISTOFFERSON / HADCO Corporation
KEN HULL / United Health Services
ARTHUR E. JAMISON / A.E. Jamison & Associates, Consultants
ROBERT LERNER / IBM
RALPH SIMON / Lockheed Martin
WILLIAM VICK / Universal Instruments Corp.

# Industrial Technology: Quality Assurance

## Associate in Applied Science

The Quality Assurance concentration of the Industrial Technology program at Broome Community College is a planned sequence of college level courses leading to a Certificate or an Associate in Applied Science degree. Quality Assurance emphasizes both the theory and the application of established methods of quality in areas such as engineering, health care, education, business management, etc. The program prepares the student for immediate employment or for possible transfer to an upper division school upon graduation.

The program may require more than two years to complete, depending on a student's academic background. The department will tailor a program assuring each student the opportunity to earn either a certificate or an AAS degree in Industrial Technology with a Quality Assurance concentration. Qualified AAS degree candidates will have the opportunity to complete an internship with a local employer.

SUGGESTED SEQUENCE: Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed.

| **Introductory Courses** | **Credits** |
|---|---|
| MAT 136 College Algebra and Trigonometry | 4 |
| MAT 156 Algebra and Trigonometry for Calculus | 4 |
| MAT 124 Statistics I | 3 |
| MET 113 Engineering Drawing I | 2 |
| ENG 110 College Writing I | 3 |

| **Additional Courses for Certificate** | |
|---|---|
| SQC 100,200 Orientation | 0 |
| CST 105 Understanding Computers | 3 |
| MET 121 Manufacturing Processes I | 2 |
| SQC 111 Acceptance Sampling | 3 |
| SQC 112 Metrology | 3 |
| SQC 113 Statistical Process Control | 3 |
| SQC 244 Reliability and Life Testing | 3 |
| **Total** | **33** |

| **Remaining Courses for Degree** | |
|---|---|
| MAT 224 Statistics II | 3 |
| PHY 161 Physics I | 4 |
| CHM 120 Fundamentals of Chemistry | 4 |
| Approved Elective | 3 |
| ENG 150 Technical Writing | 3 |
| Approved Social Science Electives | 6 |
| SQC 220 Senior Practicum | 3 |
| MAT 245 Design of Experiments | 3 |
| EET 183 Applied Electricity | 3 |
| **Total** | **32** |

AAS Industrial Technology
Quality Assurance Emphasis
**Minimum Credits** ..... **65**

# Liberal Arts and Sciences

**Program supervised by:**

Dean of Liberal Arts and Human Services
Office: Titchener Hall, Room 210
Telephone: 607 778-5031/5021

## Associate in Arts

Liberal Arts offers traditional university parallel programs — the Associate in Arts and the Associate in Science — to students aspiring to baccalaureate degree study. Graduates transfer to institutions throughout the SUNY system and to public and private colleges in New York and other states.

A.A. or A.S. degree recipients are guaranteed transfer to some four-year college or university of The State University of New York (SUNY). Students should learn as much as they can about program requirements at transfer colleges.

| | Credits |
|---|---|
| **Academic Planning Seminar** | 1 |
| COL 105 (required of all first time students) | |
| **English** | 9 |
| ENG 110 and 111, Written Expression I and II, and ENG 220 Communicating About Ideas and Values | |
| **History** | 6 |
| HIS 116 and 117, The West and the World I & II | |
| **Foreign Language** | 0-8 |
| As advised, per high school preparation. | |
| Grade of 85 on 3rd year exam qualifies for exemption, as does completion of 4th year language. All others must complete language at BCC through Beginning II level. | |
| **Mathematics or elective (as advised)** | 3-6 |
| If High School Course III completed with test grade of 85, SUNY requirement is met and students take one course at BCC. All others must complete a SUNY-approved course at BCC. Some students will require remedial coursework. | |
| **Approved sequences in Biology, Chemistry, Physics and Physical Sciences** | 8 |
| **Humanities (Literature, Philosophy, Humanities courses)** | 3 |
| **Physical Education** | 1 |
| No more than 2 credits can be used to fulfill degree requirements. At least 1 credit from PED 103, 118, 119, 127, 135, 137, 143, 146, 147, 148, 155, 173 or varsity sport. | |
| **U.S. History** | 3 |
| HIS 130, 131, 180, 183, 187, 188. Students who pass the Regents History and Government exam with an 85, may take a "theme" or "period" course. | |
| **Art, Music, Theatre** | 3 |
| **Civic Education (Social Science)** | 6 |
| At least 3 credits must be from the following courses: CTP 275, ECO 110/111, HIS 130/131, SOC 110/111, SOS 111/120, POS 201/204. | |
| **Behavioral / Social Science** | 3 |
| Courses from Anthropology (ANT), Geography (GEO), Economics (ECO), Political Science (POS), Psychology (PSY), Sociology (SOC), and Social Science (SOS). | |
| **Electives** | 3-18 |
| Selections from approved listing preceding each semester's registration. | |
| **Total number of credits** | **64 minimum** |

**A Liberal Arts certificate is available to students who complete a predetermined selection of courses on this page. Please contact the program coordinator, above, for more information.**

**Program supervised by:**

Dean of Liberal Arts and Human Services
Office: Titchener Hall, Room 210
Telephone: 607 778-5031/5021

# Liberal Arts and Sciences

## Associate in Science: Science Option Transfer Program[1]

This program is designed for students planning careers in biology, forest science, chemistry, the physical sciences, medicine, dentistry, and related fields.

SEQUENCE OF COURSES: This model is a two-year course schedule for students meeting all program requirements and deciding to pursue full-time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part-time study.

**FIRST YEAR**

| | Credits |
|---|---|
| **Academic Planning Seminar** | 1 |
| COL 105 (required of all first time students) | |
| **English** | 6 |
| ENG 110 and 111, Written Expression I and II | |
| **History** | 3 |
| HIS 116 and 117 | |
| **Mathematics** | 8 |
| MAT 181 and 182 Calculus I and II, or if a student is not prepared for these courses, he or she may take MAT 136 College Algebra and Trigonometry and MAT 156 Algebra and Trigonometry for Calculus, first. | |
| **2 Laboratory Science Sequences** | 16 |
| BIO 117 and BIO 118 Principles of Biology I and II and CHM 145 and CHM 146 Chemistry for those planning careers in medicine, veterinary medicine, dentistry, forest biology, marine biology, pharmacy or forest chemistry. | |
| **Physical Education** | 1 |
| A minimum of 1 credit must be taken from PED 118, 119, 127, 135, 137, 143, 144, 146, 147, 148, 173. | |

**SECOND YEAR**

| | Credits |
|---|---|
| **English** | 3 |
| ENG 220 Communicating About Ideas and Values | |
| **Arts (ART, MUS, THR) or Humanities (PHI, LIT, HUM)** | 3 |
| **Social Science/Civic Education** | 6 |
| Choose from ECO 110/111, POS 201/204, SOC 110/111, SOS 101/111/120, CTP 275 | |
| **2 Laboratory Science Sequences** | 16-18 |
| PHY 161 and 162 Physics and CHM 245 and 246 Organic Chemistry, for those planning careers in medicine, veterinary medicine, dentistry, forest chemistry, forest biology, marine biology, or pharmacy. | |
| **Foreign Language (Exemption: 85 on Regents Exam) OR Math, if required.** | |
| **Total number of credits** | **69 minimum** |

[1]**NOTE:** The Science option is intended for students planning academic majors or professional careers in science, chemistry, biology, biochemistry, microbiology, astronomy, geology, physics, etc. — or medicine, dentistry, veterinary medicine, and pharmacy.

# Liberal Arts Model Programs

By appropriate course selection in consultation with faculty advisors, students pursuing the A.A. and A.S. Liberal Arts and Science degrees may prepare for transfer to upper-division study in the subject areas listed below and on the following pages. Students should maintain close contact with their planned transfer institutions to be sure they are enrolled in appropriate courses.

All students must meet General Education requirements.

**Program supervised by:**

Dean of Liberal Arts and Human Services
Office: Titchener Hall, Room 210
Telephone: 607 778-5031/5021

## American Studies Apply to AA Program

**Suggested Course Selections:**

**First Year**

| Courses | Credits |
|---|---|
| ENG 110 and 111 | 6 |
| HIS 116 and 117 | 3 |
| HIS 130 | 3 |
| Foreign Language | 0-8 |
| MAT | 3-4 |
| POS 201 | 3 |
| Laboratory Science | 4 |
| Physical Ed. | 1 |
| **Total** | **minimum 32** |

**Second Year**

| Courses | Credits |
|---|---|
| LIT 210 or LIT 211 | 3 |
| HIS 131/187 | 6 |
| ENG 220 | 3 |
| Social Science/Civic Ed. | 6 |
| Fine/Performing Arts | 3 |
| Philosophy | 3 |
| Electives | 6-9 |
| **Total** | **minimum 32** |

## Pre-Architecture Apply to Individual Studies AS

**Suggested Course Selections:**

**First Year**

| Courses | Credits |
|---|---|
| ENG 110 and 111 | 6 |
| PSY 110 | 3 |
| PHY 161/162 | 8 |
| CIV 113/CIV 119(4) or CIV 105/CIV 159(5) | 4 |
| MAT 181 | 4 |
| ECO 110 | 3 |
| ART 105/106 | 6 |
| Physical Education | 1 |
| **Total** | **minimum 35** |

**Second Year**

| Courses | Credits |
|---|---|
| LIT | 3 |
| ART 108/109 | 6 |
| Social Science/Civic Ed. | 3 |
| ART 115 | 3 |
| CIV 114 | 2 |
| CIV 231 | 2 |
| CIV 238 | 3 |
| Electives | 9 |
| PHI 111/112, CIV, CST, ART, INT | |
| **Total** | **31** |

## Civil and Public Service Apply to AA Program

**Suggested Course Selections:**

**First Year**

| Courses | Credits |
|---|---|
| ENG 110 and 111 | 6 |
| HIS 116 and 117 | 6 |
| HIS 131[2] | 3 |
| Philosophy | 3 |
| MAT | 3-4 |
| MAT 124[2] | |
| Laboratory Science sequence | 8 |
| Social Science (POS 204, SOS 111) | 3 |
| Physical Ed. | 1 |
| **Total** | **minimum 33** |

**Second Year**

| Courses | Credits |
|---|---|
| ENG 220 | 3 |
| Philosophy (PHI 206) | 3 |
| POS 201 | 3 |
| Fine/Performing Arts | 3 |
| Foreign Language | 0-8 |
| Related electives | 12-19 |
| ECO 110, 111, PSY 110, SOC 110, 111, BUS 100, 245, 249 | |
| **Total** | **minimum 31** |

## Consumer Economics and Housing[1] Apply to AA Program

**(SUNY College of Human Ecology at Cornell)**

**First Year**

| Courses | Credits |
|---|---|
| ENG 110 and 111 | 6 |
| MAT 145 and 146[3] | 6 |
| HIS 116 and 117 | 6 |
| Laboratory Science | 8 |
| BIO 131/132 or CHM 145/146 or PHY 161/162 | |
| Philosophy | 3 |
| Physical Education | 1 |
| Fine/Performing Arts | 3 |
| **Total** | **33** |

**Second Year**

| Courses | Credits |
|---|---|
| LIT | 3 |
| ECO 110 and 111 | 6 |
| CST 105 | 3 |
| PED | 1 |
| POS 201 | 3 |
| BUS 141 | 3 |
| PSY 110 | 3 |
| ENG 220 | 3 |
| SOC 110 | 3 |
| Free Electives | 3 |
| **Total** | **31** |

[1]**These are special transfer agreement programs with designated colleges and universities. Students study at BCC for one or two years in Liberal Arts programs and their remaining years at senior colleges in Bachelor's Degree Studies. For information on transfers, see pages 30-31.**

[2]These courses are "strongly recommended"
[3]These courses are "recommended"

**Program supervised by:**

Dean of Liberal Arts and Human Services
Office: Titchener Hall, Room 210
Telephone: 607 778-5031

## Criminal Justice - Transfer Apply to AA Program

**Suggested Course Selections:**

**First Year**

| Courses | Credits |
|---|---|
| ENG 110 and 111 | 6 |
| HIS 100 | 3 |
| MAT 124 | 3 |
| LIT | 3 |
| POS 201 | 3 |
| Social Science (PSY 110 and SOC 110) | 6 |
| Philosophy | 3 |
| Criminal Justice CRJ 101[2] plus elective | 6 |
| Physical Ed. | 1 |
| **Total** | **34** |

**Second Year**

| Courses | Credits |
|---|---|
| Laboratory Science sequence | 8 |
| Philosophy | 3 |
| Criminal Justice | 6 |
| ENG 220 | 3 |
| CRJ 245 | 3 |
| Foreign Language | 0-8 |
| **Total** | **minimum 30** |

## Cytotechnology[1] Apply to AA Program

**(For transfer to the SUNY Health Science Center at Syracuse, "B" grades in science courses required)**

**Suggested Course Selections:**

**First Year**

| Courses | Credits |
|---|---|
| ENG 110 and 111 | 6 |
| BIO 117 and 118 | 8 |
| CHM 145 and 146 | 8 |
| LIT | 3 |
| BIO 150 | 4 |
| MAT 124 | 3 |
| HIS 100 | 3 |
| **Total** | **35** |

**Second Year**

| Courses | Credits |
|---|---|
| BIO 131 and 132 | 8 |
| Humanities | 3 |
| Social Science/Civic Ed. | 6 |
| Physical Ed. | 1 |
| Foreign Language or electives | 0-8 |
| ENG 220 | 3 |
| Fine/Performing Arts | 3 |
| **Total** | **minimum 32** |

## English/English Education Apply to AA Program

**Suggested Course Selections:**

**First Year**

| Courses | Credits |
|---|---|
| COL 105 Academic Planning Seminar | 1 |
| ENG 110 College Writing I | 3 |
| HIS 116 The West and the World I | 3 |
| Foreign Language | 6-8 |
| Mathematics (MAT 124)[2] | 3 |
| Laboratory Science | 8 |
| ENG 111 College Writing II | 3 |
| HIS 117 The West and the World II | 3 |
| Physical Education | 1 |
| **Total** | **31** |

**Second Year**

| Courses | Credits |
|---|---|
| American or British Lit Sequence | 6 |
| Civic Education | 3 |
| Behavioral/Social Sciences[5] | 3 |
| ENG 220 Communicating About Ideas and Values | 3 |
| Recommended Electives in Literature[4] | 12 |
| Arts (Art, Music, Theater) | 3 |
| Philosophy Elective | 3 |
| **Total** | **33** |

CTP 275 Internship offers students the opportunity to work in an English classroom; students may also gain teaching experience by serving as a Supplemental Instruction leader.

**[1]These are special transfer agreement programs with designated colleges and universities. Students study at BCC for one or two years in Liberal Arts programs and their remaining years at senior colleges in Bachelor's Degree Studies. For information on transfers, see pages 30-31.**

[2]These courses are "strongly recommended"

[3]These courses are "recommended"

[4]Students are encouraged to take courses ranged broadly across the disciplines.

[5]110 General Psychology is recommended.

## Environment and Forest Biology

**(SUNY College of Environmental Science and Forestry, Syracuse)**

**First Year**

| Courses | Credits |
|---|---|
| ENG 110 and 111 | 6 |
| CHM 145 and 146 | 8 |
| BIO 117 and 118 | 8 |
| MAT 181 | 4 |
| HIS 116 and HIS 117 | 6 |
| Physical Ed. | 1 |
| **Total** | **33** |

**Second Year**

| Courses | Credits |
|---|---|
| Humanities | 3 |
| CHM 245 and 246 | 10 |
| Social Science/Civic Ed. | 6 |
| PHY 161 and 162 | 8 |
| ENG 220 | 3 |
| **Total** | **30** |

## Forest Chemistry

**(SUNY College of Environmental Science and Forestry, Syracuse)**

**First Year**

| Courses | Credits |
|---|---|
| ENG 110 and 111 | 6 |
| HIS 116 | 3 |
| BIO 117 and 118 | 8 |
| CHM 145 and 146 | 8 |
| MAT 181 | 4 |
| MAT 182 or elective | 3-4 |
| **Total** | **minimum 33** |

**Second Year**

| Courses | Credits |
|---|---|
| Humanities | 3 |
| HIS 117 | 3 |
| CHM 245, 246 | 10 |
| PHY 161, 162 | 8 |
| ECO 110 | 3 |
| Fine/Performing Arts | 3 |
| Physical Education | 1 |
| ENG 220 | 3 |
| **Total** | **minimum 34** |

**Program supervised by:**

Dean of Liberal Arts and Human Services
Office: Titchener Hall, Room 210
Telephone: 607 778-5031

**Program supervised by:**

Dean of Liberal Arts and Human Services
Office: Titchener Hall, Room 210
Telephone: 607 778-5031

## Forest Resources Management Apply to AA Program

**Suggested Course Selections:**

**First Year**

| Courses | Credits |
|---|---|
| ENG 110 and 111[2] | 6 |
| HIS 100 | 3 |
| MAT 181 | 4 |
| BIO 117 and 118[1] Laboratory Science seq. | 8 |
| Physical Ed. | 1 |
| Humanities | 3 |
| CHM 145 and 146[1] | 8 |
| **Total** | **33** |

**Second Year**

| Courses | Credits |
|---|---|
| Foreign Language | 3-4 |
| ENG 220 | 3 |
| Social Science/Civic Ed. ECO 110 POS 201[2] | 6 |
| PHY 161/162[2] Laboratory Science | 8 |
| CST 105 | 3 |
| Specific electives | 9 |
| **Total** | **minimum 32** |

## Forest Technology Apply to AA Program

**Suggested Course Selections:**

**First Year**

| Courses | Credits |
|---|---|
| ENG 110 and 150 | 6 |
| MAT 136 and 156 | 8 |
| ECO 110 or 111 | 3 |
| BIO 111 and 112 | 8 |
| Electives | 6 |
| **Total** | **31** |

**Second Year**

**(BCC students transfer to Wanakena)**

## Global Studies Apply to AA Program

**Suggested Course Selections:**

**First Year**

| Courses | Credits |
|---|---|
| ENG 110 and 111 | 6 |
| HIS 116 and 117 | 6 |
| GEO 120 | 3 |
| Foreign Language | 6 |
| MAT | 3 |
| Laboratory Science | 8 |
| Physical Education | 1 |
| **Total** | **minimum 33** |

**Second Year**

| Courses | Credits |
|---|---|
| ENG 220 | 3 |
| Humanities (PHI 104) | 3 |
| Fine/Performing Arts | 3 |
| HIS elective | 3 |
| SOS 116 | 3 |
| ECO 111 | 3 |
| Foreign Language or electives | 9 |
| Electives | 6 |
| **Total** | **minimum 33** |

## Human Development and Family Studies[1]

**(SUNY College of Human Ecology at Cornell)**

**First Year**

| Courses | Credits |
|---|---|
| ENG 110 and 111 | 6 |
| HIS 116 and 117 | 6 |
| MAT 124 | 3 |
| Foreign Language | 0-8 |
| PSY 110 | 3 |
| BIO 131 and 132[3] | 8 |
| Physical Eduation | 1 |
| **Total** | **32** |

**Second Year**

| Courses | Credits |
|---|---|
| Humanities elective | 3 |
| MAT elective | 3 |
| PSY 211 and PSY elective | 6 |
| Social Science/Civic Ed. | 3 |
| FREE electives | 10 |
| Physical Education | 1 |
| ENG 220 | 3 |
| Fine/Performing Arts | 3 |
| **Total** | **32** |

[1]**These are special transfer agreement programs with designated colleges and universities. Students study at BCC for one or two years in Liberal Arts programs and their remaining years at senior colleges in Bachelor's Degree Studies. For information on transfers, see pages 30-31.**

[2]These courses are "strongly recommended"
[3]These courses are "recommended"

## International Relations Apply to AA Program

**Suggested Course Selections:**

**First Year**

| Courses | Credits |
|---|---|
| ENG 110 and 111 | 6 |
| Foreign Language or electives | 6-8 |
| MAT | 3-4 |
| HIS 116 and 117 | 6 |
| Laboratory Science sequence | 8 |
| ANT 111 | 3 |
| PED | 1 |
| **Total** | **minimum 33** |

**Second Year**

| Courses | Credits |
|---|---|
| Foreign Language | 6 |
| POS 203/SOS 111 | 3 |
| LIT | 3 |
| Philosophy elective | 3 |
| Fine/Performing Arts | 3 |
| Free electives | 10-12 |
| ENG 220 | 3 |
| **Total** | **minimum 31** |

## Landscape Architecture Apply to Individual Studies AS

**Suggested Course Selections:**

**First Year**

| Courses | Credits |
|---|---|
| ENG 110 and 111 | 6 |
| HIS 116 and 117 | 6 |
| MAT | 8 |
| MAT 136, 156 | |
| MAT 181, 182 | |
| Laboratory Science sequence | 8 |
| BIO 111, 112 | |
| Physical Ed. | 1 |
| ART elective: 105, 108, 115 | 3 |
| **Total** | **32** |

**Second Year**

| Courses | Credits |
|---|---|
| CIV 113[2]/CIV 119[2] or CIV 105[2]/CIV 159[3] | 4-5 |
| Social Science/Civic Ed. | 6 |
| ENG 220 | 3 |
| Humanities (LIT or PHI) | 3 |
| Electives | 10 |
| Related courses | 6 |
| ART 106, 109 | |
| CIV 201 | |
| CST 105 | |
| PHS 116 | |
| PHY 161 | |
| **Total** | **33** |

## Pre-Law Apply to AA Program

**Suggested Course Selections:**

**First Year**

| Courses | Credits |
|---|---|
| ENG 110 and 111 | 6 |
| HIS 116 and 117 | 6 |
| MAT | 3-4 |
| Laboratory Science sequence | 8 |
| Foreign Language | 3-6 |
| Philosophy electives (PHI 201, 206) | 6 |
| PED | 1 |
| **Total** | **minimum 33** |

**Second Year**

| Courses | Credits |
|---|---|
| LIT | 3 |
| PSY 110 | 3 |
| POS 201 or 204 | 3 |
| Electives | 18 |
| POS 201, 204 | |
| ECO 110, 111, 104 | |
| SOC 110, 111, SOS 111 | |
| HIS 130, 131 | |
| PSY 110 | |
| BUS 100 | |
| ENG 220 | 3 |
| ART, MUSIC, THEATRE | 3 |
| **Total** | **33** |

## Math and Math Education Apply to AA Program

**Suggested Course Selections:**

**First Year**

| Courses | Credits |
|---|---|
| ENG 110 and 111 | 6 |
| HIS 116 and 117 | 6 |
| MAT 181/182 | 8 |
| MAT 124/224 | 6 |
| Humanities (LIT, PHI, HUM) | 3 |
| Humanities Art, Music, Theater | 3 |
| PED | 1 |
| **Total** | **33** |

**Second Year**

| Courses | Credits |
|---|---|
| MAT 281 | 4 |
| MAT 264 | 4 |
| PHY 161, 162 Laboratory Science | 8 |
| MAT 266 | 3 |
| MAT 250 or 282 | 4 |
| Social Science/Civic Ed. | 6 |
| ENG 220 | 3 |
| **Total** | **minimum 32** |

**Program supervised by:**

George Higginbottom
Office: Titchener Hall, Room 210
Telephone: 607 778-5031
E-mail: higginbottom_g@sunybroome.edu

[2]These courses are "strongly recommended"
[3]These courses are "recommended"

**Program supervised by:**

Dean of Liberal Arts and Human Services
Office: Titchener Hall, Room 210
Telephone: 607 778-5031

## Medical Technology Apply to Individual Studies AS Program

**Suggested Course Selections:**

**First Year**

| Courses | Credits |
|---|---|
| ENG 110 and 111 | 6 |
| BIO 117 and 118 | 8 |
| CHM 145 and 146 | 8 |
| MAT 156 | 4 |
| HIS 100 | 3 |
| Humanities (PHI, LIT, HUM) | 3 |
| **Total** | **32** |

**Second Year**

| Courses | Credits |
|---|---|
| BIO 131 | 4 |
| BIO 150 | 4 |
| CHM 245 | 5 |
| Social Science/Civic Ed. | 6 |
| HIS 130, 131 | 3 |
| ENG 220 | 3 |
| CHM 224 | 4 |
| ART, MUS, THR | 3 |
| Physical Ed. electives | 1 |
| **Total** | **33** |

## Nursing Apply to AA Program

**(Transfer to Binghamton University's Decker School of Nursing for a B.S. degree)**

**First Year**

| Courses | Credits |
|---|---|
| ENG 110 and 111 | 6 |
| Social Science/Civic Ed. | 6 |
| MAT 124 | 3 |
| CHM 141 and 142 | 8 |
| BIO 131 and 132 | 8 |
| PSY 110 | 3 |
| **Total** | **34** |

**Second Year**

| Courses | Credits |
|---|---|
| LIT | 3 |
| BIO 150 or MLT 208/209 | 4 |
| PSY 210 | 3 |
| Philosophy | 3 |
| Elective | 12 |
| PED | 1 |
| ENG 220 | 3 |
| ART, MUS, THR | 3 |
| **Total** | **32** |

## Pre-Pharmacy Apply to General Studies AS Program

**(Compatible with Pharmacy at University at Buffalo)**

**Suggested Course Selections:**

**First Year**

| Courses | Credits |
|---|---|
| ENG 110 and 111 | 6 |
| HIS 100 | 3 |
| BIO 117/118 | 8 |
| MAT 181/182 | 8 |
| CHM 145.146 | 8 |
| PED | 1 |
| **Total** | **34** |

**Second Year**

| Courses | Credits |
|---|---|
| Humanities (PHI, LIT, HUM) | 3 |
| ENG 220 | 3 |
| Social Science/Civic Ed. | 6 |
| CHM 245/246 | 10 |
| PHY 161/162 | 8 |
| ART, MUS, THR | 3 |
| **Total** | **33** |

## Physical Education/Recreation Apply to AA Program

**Suggested Course Selections:**

**First Year**

| Courses | Credits |
|---|---|
| ENG 110 and 111 | 6 |
| HIS 115 and HIS elective | 6 |
| MAT | 0-6 |
| Foreign Language | 3-6 |
| PED 118 or 119 | 1 |
| Related electives | 9 |
| PSY 110 | |
| ART, MUS, THR, SPK | |
| **Total** | **minimum 32** |

**Second Year**

| Courses | Credits |
|---|---|
| LIT | 3 |
| Social Science/Civic Ed. | 6 |
| SOC 111/SOS 111 | |
| PSY 210 or 211 | |
| Laboratory Science sequence | 8 |
| BIO 111, 112, or 131, 132 | |
| Related electives | 9 |
| Philosophy elective | 3 |
| ENG 220 | 3 |
| Fine/Performing Arts electives | 3-6 |
| **Total** | **minimum 32** |

## Physical Therapy Apply to Individual Studies AS Program

**(Required Courses for admission to SUNY Health Science Center, Syracuse. Program is highly competitive; therefore high grades are necessary. Transfer to other colleges may require some course alterations.)**

**First Year**

| Courses | Credits |
|---|---|
| BIO 117-118 | 8 |
| BIO 131-132 | 8 |
| CHM 145-146 | 8 |
| Civic Ed. Social Science | 3 |
| ENG 110, 111 | 6 |
| **Total** | **33** |

**Second Year**

| Courses | Credits |
|---|---|
| MAT 124 | 3 |
| MAT 156/181 (MAT 181 preferred) | 4 |
| PED | 1 |
| PHI 201 | 3 |
| PHY 161-162 | 8 |
| PSY 110 | 3 |
| PSY 210 or 211 | 3 |
| ART, MUS, THR | 3 |
| ENG 220 | 3 |
| **Total** | **31** |

Additionally all applicants must have prior volunteer or work experience in a physical therapy setting.

**Program supervised by:**

Dean of Liberal Arts and Human Services
Office: Titchener Hall, Room 210
Telephone: 607 778-5031

**Freshman year at BCC, Sophomore year at:**

**DELHI A&T**
General Agriculture
Animal Husbandry — Dairy

**WANAKENA**
See Forest Technology Model Program

**CANTON A&T**
Mortuary Science

**Details in Titchener Hall, Room 121**

## Psychology Apply to AA Program

**Suggested Course Selections:**

**First Year**

| Courses | Credits |
|---|---|
| ENG 110 | 3 |
| ENG 111 | 3 |
| HIS 116 and 117 | 6 |
| PSY 110 | 3 |
| SOC 110 | 3 |
| Foreign Language (as advised) | 0-8 |
| Laboratory Science sequence | 8 |
| ART, MUS, THR | 3 |
| PSY 210 | 3 |
| PED elective | 3 |
| **Total** | **minimum 33** |

**Second Year**

| Courses | Credits |
|---|---|
| MAT electives (as advised) | 3 |
| PSY 214 | 3 |
| PSY 245 | 3 |
| Humanities (PHI, LIT, HUM) | 3 |
| HIS 130, 131 | 3 |
| ENG 220 | 3 |
| PSY electives PSY 211, 217, 223, 227, 230 | 12 |
| **Total** | **30** |

## Pre-Respiratory Therapy[1]

**(Transfer to SUNY Health Center, Syracuse)**

**First Year**

| Courses | Credits |
|---|---|
| BIO 117-118 | 8 |
| CHM 145-146 | 8 |
| ENG 110 | 3 |
| LIT 200 | 3 |
| MAT 156[1] | 3 |
| PHY 161-162 | 8 |
| PSY 110 | 3 |
| SOC 110 | 3 |

## Teacher Education: Biology Apply to AS Program

**Suggested Course Selections:**

**First Year**

| Courses | Credits |
|---|---|
| ENG 110 and 111 | 6 |
| BIO 117 and 118 | 8 |
| CHM 145 and 146 | 8 |
| MAT 124 | 3 |
| PSY 110 | 3 |
| HIS 100 | 3 |
| PED elective | 3 |
| **Total** | **34** |

**Second Year**

| Courses | Credits |
|---|---|
| ENG 220 | 3 |
| BIO 131/132 | 8 |
| CHM 245 and 246 | 10 |
| BIO 150 | 4 |
| PHI 203 | 3 |
| MAT 124 | 3 |
| LIT elective | 3 |
| **Total** | **34** |

[1]**These are special transfer agreement programs with designated colleges and universities. Students study at BCC for one or two years in Liberal Arts programs and their remaining years at senior colleges in Bachelor's Degree Studies. Also required prior to transfer is volunteer work, actual work experience or multiple visits at a respiratory care facility. For information on transfers, see pages 30-31.**

**Program supervised by:**

Dean of Liberal Arts and Human Services
Office: Titchener Hall, Room 210
Telephone: 607 778-5031

**Freshman year at BCC, Sophomore year at:**

**DELHI A&T**
General Agriculture
Animal Husbandry — Dairy

**WANAKENA**
See Forest Technology Model Program

**CANTON A&T**
Mortuary Science

**Details in Titchener Hall, Room 121**

## Social Work[1] Apply to AA Program

**(SUNY College of Human Ecology at Cornell)**

**First Year**

| Courses | Credits |
|---|---|
| ENG 110 and 111 | 6 |
| HIS 116 and 117 | 6 |
| Laboratory Science sequence (BIO 131 and 132[2]) | 8 |
| MAT (MAT 124) | 3 |
| PSY 110 and SOC 110 | 6 |
| Foreign Language | 0-8 |
| Physical Education | 1 |
| **Total** | **minimum 30** |

**Second Year**

| Courses | Credits |
|---|---|
| Philosophy | 3 |
| CST 105 or 115 | 3 |
| ENG 220 | 3 |
| PSY 210, 214 | 6 |
| SOC 230 | 3 |
| Elective | 6 |
| ECO 110, 111; SOS 111; SOC 111 | 3 |
| ART, MUS, THR | 3 |
| Elective | 3 |
| **Total** | **33** |

## Women's Studies Apply to AA Program

**Suggested Course Selections:**

**First Year**

| Courses | Credits |
|---|---|
| ENG 110 and 111 | 6 |
| HIS 116 and 117 | 6 |
| LIT 250 | 3 |
| Laboratory Science sequence | 8 |
| MAT elective | 3-4 |
| Foreign Language | 0-8 |
| PED | 1 |
| Elective | 3 |
| **Total** | **minimum 30** |

**Second Year**

| Courses | Credits |
|---|---|
| ENG 220 | 3 |
| HIS 183 | 3 |
| PSY 110 | 3 |
| PSY 230 | 3 |
| Social Sci./Civic Ed. | 3 |
| BIO 120 | 3 |
| Philosophy | 3 |
| ART, MUS, THR | 3 |
| Electives | 6-9 |
| **Total** | **minimum 33** |

[1]These are special transfer agreement programs with designated colleges and universities. Students study at BCC for one or two years in Liberal Arts programs and their remaining years at senior colleges in Bachelor's Degree Studies. For information on transfers, see pages 30-31.

# Liberal Arts: General Studies

### Associate in Science Transfer Programs

The aim of the General Studies Program is to provide students with a broader range of curricular choices so that, under the guidance of faculty advisers, they can align their Associate degrees more closely with programs at senior institutions. The intent is to allow students with clear academic and/or career goals to structure their Associate degree programs so as to transfer as juniors to senior colleges, needing only four additional semesters to complete the baccalaureate degree. Required general education courses totaling 30-34 credits are required of General Studies (AS) students, leaving a like number of elective credits.

## Acting Sequence

**(Suggested Course Selections)**

**First Year**

| Courses | Credits |
|---|---|
| THR 111 | 3 |
| THR 112 | 3 |
| THR 109 or 151 or 152 | 3 |
| THR 246 | 3 |
| THR 266 or THR 286 | 3 |
| PED (THR 165) | 1 |
| ENG 110 | 3 |
| HIS 116 and 117 | 6 |
| Science/Math | 6-8 |
| Social Sci/Civic Ed. | 3 |
| **Total** | **31-34** |

**Second Year**

| Courses | Credits |
|---|---|
| THR 218 | 3 |
| THR 231 | 3 |
| THR 256 | 3 |
| THR 276 or THR 221 | 3 |
| THR elective | 3 |
| ENG 220 | 3 |
| Humanities (PHI, LIT, HUM) | 3 |
| Foreign Lang (As Advised) or electives | 0-8 |
| Behav/Social Sci | 3 |
| **Total** | **minimum 30** |

**Program supervised by:**

Katherine Bacon
Office: Student Center, Little Theatre
Telephone: 607 778-5191
E-mail: bacon_k@sunybroome.edu

## Art and Design: Art History Sequence

**(Suggested Course Selections)**

**First Year**

| Courses | Credits |
|---|---|
| ENG 110 | 3 |
| ENG 111 or Lit Elective | 3 |
| HIS 100 | 3 |
| ART 105, 106, 107, 115 | 11 |
| ART History Electives (choose from ART 102, 103, 104, 108, 109, 110, 111, 114, 146) ANT 110, 111; or PSY 110 | 9 3 |
| Physical Education | 1 |
| **Total** | **33** |

**Second Year**

| Courses | Credits |
|---|---|
| Foreign Language (3 years high school with 85 grade = exempt) | 0-8 |
| Math | 3/4 |
| Lab Science | 4 |
| Art History Electives (choose from ART 102, 103, 104, 108, 109, 110, 111, 114, 146) | 6-9 |
| Art & Design Studio Electives | 6-9 |
| Social Science/Civic Ed | 3 |
| ENG 220 | 3 |
| **Total** | **minimum 30** |

**Program supervised by:**

Patricia Evans
Office: Arts Annex, Room 107
Telephone: 607 778-5075
E-mail: evans_p@sunybroome.edu

## Art and Design: Studio Art Sequence

**(Suggested Course Selections)**

**First Year**

| Courses | Credits |
|---|---|
| ENG 110 | 3 |
| ENG 111 or Lit Elective | 3 |
| HIS 100 | 3 |
| ART 105, 106, 107, 115 | 11 |
| ANT 110 or 111 or PSY 110 | 3 |
| ART 116 | 3 |
| ART 217 | 3 |
| ART 140 | 3 |
| Physical Education | 1 |
| **Total** | **33** |

**Second Year**

| Courses | Credits |
|---|---|
| Foreign Language (85 grade in 3rd year exam = exempt) | 8 |
| Math | 3-4 |
| Laboratory Science | 4 |
| ART 215 | 3 |
| ART 130 | 3 |
| ART History Elective | 3 |
| ART & Design Electives | 3-12 |
| Social Science/Civic Ed Elective | 3 |
| ENG 220 | 3 |
| **Total** | **minimum 31** |

**NOTE:** Students interested in constructing an Individual Studies Program should refer to page 88 of the catalog.

## Art and Design: Interior Design / Environmental Design Sequence

**(Suggested Course Selections)**

**First Year**

| Courses | Credits |
|---|---|
| ENG 110 | 3 |
| ENG 111 or LIT elective | 3 |
| Humanities elective other than ART | 6-8 |
| Physical Education | 1 |
| CIV 159 | 3 |
| CIV 105 | 2 |
| ART 105 | 3 |
| ART 106 | 3 |
| ART 107 | 2 |
| ART 109 | 3 |
| ART 150 | 2 |
| INT 120 | 2 |
| **Total** | **minimum 33** |

**Second Year**

| Courses | Credits |
|---|---|
| ENG 220 | 3 |
| HIS 100 | 3 |
| Math Elective | 3-4 |
| Lab Science Elective | 4 |
| Social Science / Civic Ed Elective | 3 |
| Art History Elective | 3 |
| ART 213 | 2 |
| INT 210 | 4 |
| ART 111 | 3 |
| ART 115 | 3 |
| ANT 110 or 111 or PSY 110 | 3 |
| **Total** | **minimum 34** |

## Art and Design: Graphic Art Sequence

**(Suggested Course Selections)**

**First Year**

| Courses | Credits |
|---|---|
| ENG 110 | 3 |
| ENG 111 or LIT elective | 3 |
| HIS 100 | 3 |
| Humanities elective other than ART | 6 |
| Physical Education | 1 |
| ART 105, 106, 107, 115 | 11 |
| ANT 110 or 111 or PSY 110 | 3 |
| ART 125 | 3 |
| **Total** | **33** |

**Second Year**

| Courses | Credits |
|---|---|
| ENG 220 | 3 |
| Math Elective | 3-4 |
| Lab Science Elective | 4 |
| Social Science / Civic Ed Elective | 3 |
| ART 116 | 3 |
| ART 140 or ART 112 | 3 |
| ART 217 | 3 |
| ART 225 | 3 |
| ART 226 | 3 |
| ART 227 | 3 |
| ART History elective | 3 |
| **Total** | **minimum 34** |

## Teacher Education Transfer Sequence Apply to LAGS EDU
## Early Childhood (Birth through Grade 2)

**(Suggested Course Selections)**

**First Year**

| Courses | Credits |
|---|---|
| ENG 110, 111 College Writing I, II | 6 |
| HIS 100 Rise of the West | 3 |
| HIS 130 or 131 US History I or II | 3 |
| PSY 110 Intro to Psychology | 3 |
| MAT 119, 120W Mathematics for Elementary Education I and II | 6 |
| ECE 110 Intro to Early Education | 3 |
| ECE 175 Observ & Recording | 3 |
| SCI: BIO or PHS | 4 |
| **Total** | **31** |

**Second Year**

| Courses | Credits |
|---|---|
| HUM Humanities | 3 |
| PSY 211W Child Development | 3 |
| ENG 220 Communicating About Ideas | 3 |
| ARTS: Art, Music, Theater | 3 |
| SCI: BIO or PHS | 4 |
| LIT Literature | 3 |
| Minor 1[1] (Building on LA) | 3 |
| Minor 2[1] | 3 |
| Minor 3[1] or ECE 200/201 or CTP 275 PS Practicum | 3 or 4 |
| ECE 120 Curriculum Development | 3 |
| PED | 1 |
| **Total** | **minimum 32** |

**Program supervised by:**

Barbara Nilsen, Ed.D.
Office: Titchener, Room T-210G
Telephone: 607 778-5029
E-mail: nilsen_b@sunybroome.edu

[1]NYS requires that students seeking certification to teach Elementary school select and take a sequence of courses in an academic concentration/minor.

**NOTE:** Students interested in constructing an Individual Studies Program should refer to page 88 of the catalog.

## Teacher Education Transfer Sequence Apply to LAGS EDU Childhood (Grades 1 - 6)

**(Suggested Course Selections)**

**First Year**

| Courses | Credits |
|---|---|
| ENG 110, 111 College Writing I, II | 6 |
| HIS 100 Rise of the West | 3 |
| HIS 130 or 131 US History I or II | 3 |
| PSY 110 Intro to Psychology | 3 |
| MAT 119, 120W Mathematics for Elementary Education I and II | 6 |
| ECU 111 Foundations of American Education | 3 |
| Minor 1[1] | 3 |
| SCI: BIO or PHS | 4 |
| **Total** | **minimum 30** |

**Second Year**

| Courses | Credits |
|---|---|
| HUM Humanities | 3 |
| PSY 211W Child Development | 3 |
| ENG 220 Communicating About Ideas | 3 |
| ARTS: Art, Music, Theater | 3 |
| SCI: BIO or PHS | 4 |
| LIT: Literature | 3 |
| Minor 3[1] | 3 |
| HIS 130 or 131 US History I or II | 3 |
| POS 201 Intro to American Gov't | 3 |
| PED | 1 |
| **Total** | **29** |

**Teacher Education Students: see "Teacher Preparation and Certification," pg. 87**

## Teacher Education Transfer Sequence Middle Childhood/Adolescence (grades 5-8 and 7-12)

**Apply as LAGS EDU**

**(Suggested Course Selections)**

**First Year**

| Courses | Credits |
|---|---|
| ENG, 110, 111 College Writing I, II | 6 |
| HIS 100 Rise of the West | 3 |
| HIS 130 or 131 American History I, II | 3 |
| PSY 110 Intro to Psychology | 3 |
| MAT 124 or higher | 3 |
| EDU 111 Foundations of Education | 3 |
| Minor 1 and 2 (1) | 3 |
| SCI: BIO or PHS | 4 |
| **Total** | **minimum 30** |

**Second Year**

| Courses | Credits |
|---|---|
| ARTS Arts elective | 3 |
| PSY 212W Adolescent Development | 3 |
| HUM elective | 3 |
| SCI: BIO or PSY | 4 |
| LIT Literature | 3 |
| Minor 3 (1) | 3 |
| HIS 130 or 131, US History I or II | 3 |
| POS 201 Intro to Am Government | 3 |
| PED | 1 |
| **Total** | **32** |

## Music Industry Transfer to SUNY Oneonta

**(Suggested Course Selections)**

**First Year**

| Courses | Credits |
|---|---|
| MUS 101 Introduction to Music | 3 |
| MUS 105 Music Theory I | 3 |
| MUS 106 Music Theory II | 3 |
| MUS 108 History of Music to 1800 | 3 |
| MUS 120 Piano I | 1 |
| MUS 197 Applied I | 1 |
| MUS 198 Applied II | 1 |
| MUS Ensembles | 2 |
| BUS 110 Introduction to Business | 3 |
| BUS 141 Marketing | 3 |
| HIS 100 | 3 |
| SPK 110 Effective Speaking | 3 |
| ENG 110 English | 3 |
| MAT Mathematics | 3-4 |
| **Total** | **35-36** |

**Second Year**

| Courses | Credits |
|---|---|
| MUS 111 19th Century Music | 3 |
| MUS 112 20th Century Music | 3 |
| MUS Ensembles | 2 |
| BUS 118 Business Law I | 3 |
| ECO 110 | 3 |
| PHI Philosophy | 3 |
| Lab Science Biology or Chemistry | 4 |
| LIT Literature | 3 |
| PED Physical Education | 1 |
| ENG 220 English | 3 |
| **Total** | **31** |

**Program supervised by:**

Michael Kinney
Office: Arts Annex
Telephone: 607 778-5323
E-mail: kinney_m@sunybroome.edu

[1]NYS requires that students seeking certification to teach Elementary school select and take a sequence of courses in an academic concentration/minor.

[1]Middle Childhood and Adolescence
English, Biology, Language, Math, Physical Science, History, Physical Education, Technology

**Program supervised by:**

Michael Kinney
Office: Arts Annex
Telephone: 607 778-5323
E-mail: kinney_m@sunybroome.edu

## Music Education and Performance Sequence

**(Suggested Course Selections)**

**First Year**

| Courses | Credits |
|---|---|
| MUS 101 Introduction to Music | 3 |
| MUS 105 Music Theory I | 3 |
| MUS 106 Music Theory II | 3 |
| MUS 108 History of Music - Ren. to 1800 | 3 |
| MUS 115 Ear Training I | 1 |
| MUS 116 Ear Training II | 1 |
| MUS 120 Piano Class I | 1 |
| MUS 121 Piano Class II | 1 |
| MUS 197 Applied Music I | 1 |
| MUS 198 Applied Music II | 1 |
| MUS Ensembles | 2 |
| ENG 110 | 3 |
| HIS 130 or 131 | 3 |
| PSY 110 | 3 |
| Approved Elective | 3 |
| **Total** | **32** |

**Second Year**

| Courses | Credits |
|---|---|
| MUS 107 Theory III | 3 |
| MUS 111 19th Century Music | 3 |
| MUS 112 20th Century Music | 3 |
| MUS 117 Ear Training III | 1 |
| MUS 185 Beginning Guitar | 1 |
| MUS 194 Voice Class I | 1 |
| MUS 297 Applied Music III | 1 |
| MUS 298 Applied Music IV | 1 |
| MUS Ensembles | 2 |
| ENG 220 | 3 |
| Civic Ed. | 3 |
| Lab Science | 4 |
| MAT | 3-4 |
| PED | 1 |
| **Total** | **30-31** |

**Program supervised by:**

Katherine Bacon
Office: Student Center, Little Theatre
Telephone: 607 778-5191
E-mail: bacon_k@sunybroome.edu

## Theater Sequence

**(Suggested Course Selections)**

**First Year**

| Courses | Credits |
|---|---|
| THR 101 | 3 |
| THR 109 or 110 | 3 |
| THR 111 | 3 |
| THR 112 | 3 |
| THR 201 or 202 | 3 |
| ENG 110 | 3 |
| HIS 100 | 3 |
| Science/Math | 6-8 |
| Social Sci/Civic Ed | 3 |
| **Total** | **30-32** |

**Second Year**

| Courses | Credits |
|---|---|
| THR 114 | 3 |
| THR 151 or 152 | 3 |
| THR 231 | 3 |
| THR 266 | 3 |
| THR Elective | 3 |
| PED (THR 165) | 1 |
| ENG 220 | 3 |
| LIT elective | 3 |
| Foreign Lang (As Advised) or electives | 0-8 |
| Behav/Social Sci | 3 |
| **Total** | **minimum 33** |

# Teacher Preparation and Certification

Each teacher certification candidate must complete a bachelor's degree that includes a minor or concentration in an academic discipline. Individual institutions will be selecting from among the concentrations approved by the Regents. They are all listed below. Check with the transfer institution before selecting a concentration.

## Teacher Certification Levels and Concentrations

- **Early Childhood Education – Birth through Grade 2**

The arts; career development and occupational studies; English language arts; health, physical education and family and consumer sciences; a language other than English; mathematics, science and technology; social studies

Early Childhood Special Education – teaching children with disabilities birth through Grade 2

- **Childhood Education – Grades 1 through 6**

The arts; career development and occupational studies; English language arts; health, physical education and family and consumer sciences; a language other than English; mathematics, science and technology; social studies

Childhood Special Education – teaching children with disabilities Grades 1-6

- **Middle Childhood Education – Grades 5–9**

Generalist option – A major, concentration or the equivalent in one or more in the arts, career development and occupational studies; English Language arts; health, physical education and family and consumer sciences; languages other than English; mathematics, science and technology; social studies

Specialist option: A major in English; a language other than English, biology, chemistry, earth science, physics, mathematics; social studies (includes economics, government and at least 21 semester hours in history and geography of the United States and the world

Middle Childhood Special Education – teaching children with disabilities Grades 5-9

- **Adolescence Education – Grades 7 through 12**

A major or its equivalent in English; a language other than English, biology, chemistry, earth science, physics, mathematics, social studies (including a study in economics, government and at least a total of 21 semester hours of study in the history and geography of the United States and the world.

Adolescence Special Education (grades 7-12)

### Other certification areas are:

- Special Subjects – Dance; health education; Music; physical education; technology education, theatre, visual arts (all grades)
- Teaching students who are deaf or hard of hearing (all grades)
- Teaching students who are blind or visually impaired (all grades)
- Teaching students with speech and language disabilities (all grades)
- Teaching English to speakers of other languages (all grades)
- Literacy specialist (Birth through Grade 6 or Grades 5–12)
- Masters Degree in Teaching Literacy (Birth through Grade 6 or Grades 5 through 12)
- Agriculture; business and marketing; family and consumer science (Grades 5–12)
- Educational technology specialists (all grades)
- Library media specialists (all grades)

BCC can provide the general education courses and a portion of the courses needed for a major, concentration, or minor that is required for all teacher certificates. High school or college foreign language requirement must be met for all teacher education candidates. Most or all of the pedagogical core is taught at the teacher education institution. Students should explore the various teacher education institutions to determine which teaching certificates and concentrations each offers. Each one is unique and has its own requirements. With careful course selection, BCC graduates can enter most institutions as juniors. Teacher education programs are requiring at least a 2.5 to 2.8 GPA for entrance into their programs.

Persons interested in careers in teaching are required by New York State to have a proficiency in a language other than English, complete 300 hours of field experience/student teaching, obtain the appropriate bachelor degree from a teacher preparation institution, pass the New York State Teacher Certification Examinations, and complete a Masters degree within a specified time. For more information go to www.highered.nysed.gov/tcert

**Program supervised by:**
Douglas Garnar
Office: Titchener Hall, 210E
Telephone: 607 778-5377
E-mail: garnar_d@sunybroome.edu

# Liberal Arts: Individual Studies

Students whose academic goals cannot be met through existing programs may be allowed to structure individualized degree programs. Qualified students develop, with an advisor, an "area of concentration." *This area of concentration must be a cohesive program of study clearly related to employment or upper division academic goals.*

Completion of the Individual Studies Program can lead to an Associate in Science (AS) or Associate in Applied Science (AAS) degree, depending upon the student's area of concentration. The AS degree program is designed for baccalaureate transfer, and the AAS degree for immediate employment. *Admission into the program requires the student to develop a Plan of Studies which is approved by the program coordinator.*

This is not a program for students unsure of their goals or simply exploring several areas of study.

## Associate in Science Degree[1] (60 credits)

- 30 Credits in student's Area of Concentration.
- 30 Credits in English, Humanities, Natural Sciences, Mathematics and Social Sciences distributed as follows.
  9 Credits in Humanities ENG 110, 111, and 220
  6 Credits in Social Science (3 must be designated Civic Education courses)[1]
- Mathematics (as advised) 0-6 or 8 credits
  8 Credits in Laboratory Science
  Liberal Arts Electives to make 62 credit total
  2 Credits in Physical Education one Credit minimum from PED 118, 119, 127, 135, 137, 143, 144, 146, 147, 148, 173.

## Associate in Applied Science Degree[1] (60 credits)

- Minimum of 20 semester credits in Liberal Arts and Sciences to include:
  9 Credits in Humanities (ENG 110 and ENG 220 required) ENG 110, 111, and 220
  6 Credits in Social Science (3 must be in designated Civic Education courses)
  8 Credits in Natural and Physical Science, including Mathematics
- 10 Credits of Technical Electives
- 30 Credits in student's Area of Concentration

For additional information contact the Program Supervisor.

[1]Students in both AS and AAS programs must satisfy General Education requirements: (see page 21).

NOTE: Two Writing Emphasis Courses are required after ENG 110 and before ENG 220

NOTE: Students interested in General Studies sequences in Art and Design, Elementary Education, Music and Theatre should refer to pages 87-90 of this catalog for General Studies sequences in Liberal Arts and Related Careers Programs.

**Program supervised by:**

Jan Pitera
Office: Business Building, Room 108
Telephone: 607 778-5493
E-mail: pitera_j@sunybroome.edu

**Contact person:**

Michael Kuryla
Office: Mechanical Building, Room 222
Telephone: 607 778-5078
E-mail: kuryla_m@sunybroome.edu

Membership of the Business Department Advisory Council consists of representatives from area organizations. The Committee members are selected to serve on a rotating basis and are selected annually with some members remaining on the council for multiple terms.

**See also: Business Administration pg. 42**

# Management

## Associate in Science Transfer Program

The Management program offers the student course work in Management, General Business, Liberal Arts, Math, and Sciences. The program has transfer opportunities for the student interested in a bachelors degree in Management or Business Administration, as well as employment possibilities for students who choose to enter the workforce upon graduation.

The program is designed to be completed in two years by the full-time student. Part-time students may also pursue this degree and can proceed at their own pace taking day, evening, or weekend classes.

| FIRST YEAR | | | Hours/Week | | Credits/Semester |
|---|---|---|---|---|---|
| **Fall Semester** | | | Class | Lab | |
| BUS | 111 | Finanical Accounting | 4 | 0 | 4 |
| BUS | 118 | Business Law I | 3 | 0 | 3 |
| BUS | 141 | Marketing | 3 | 0 | 3 |
| BUS | 112 or BUS 110 | Quantitative Business Methods or Introduction to Business | 3 | 0 | 3 |
| ENG | 110[2] | College Writing | 3 | 0 | 3 |
| BUS | 107 | Freshman Experience | 1 | 0 | 1 |
| | | | **17** | **0** | **17** |
| **Spring Semester** | | | | | |
| BUS | 210 | Managerial Accounting | 4 | 0 | 4 |
| BUS | 120 | Business Law II | 3 | 0 | 3 |
| BUS | 115 | Business Statistics | 3 | 0 | 3 |
| ECO | 111 | Macroeconomics | 3 | 0 | 3 |
| CST | 105 | Computer Applications | 2 | 2 | 3 |
| | | | **15** | **2** | **16** |
| **SECOND YEAR** | | | | | |
| **Fall Semester** | | | | | |
| BUS | 246 | Principles of Management | 3 | 0 | 3 |
| ECO | 110 | Microeconomics | 3 | 0 | 3 |
| — | — | Advisor Approved General Education Course[1] | 3 | 3 | 3 |
| — | — | Advisor Approved General Education Course[1] | 3 | 0 | 3 |
| MAT | 136/146 | College Algebra or Intro. to Calculus | 3-4 | 0 | 3-4 |
| | | | **15-16** | **0-3** | **15-16** |
| **Spring Semester** | | | | | |
| — | — | Advisor Approved General Education Course[1] | 3 | 0 | 3 |
| BUS | 248 | Human Resource Management | 3 | 0 | 3 |
| SOS | 116 | International Business Environments | 3 | 0 | 3 |
| — | — | Lab Science Elective | 4 | 3 | 4 |
| ENG | — | Advisor Approved ENG course | 3 | 0 | 3 |
| PED | — | Physical Education | 2 | 0 | 1 |
| | | | **18** | **3** | **17** |

**Total Credits: 65-66 Credits**

[1]See Advisor: Non general education electives may be acceptable for students not transferring or transferring to non-SUNY colleges.

[2]or ENG 111, based on placement test.

# Marketing/Management/Sales

## Associate in Applied Science

The Marketing/Management/Sales Associate in Applied Science is designed as a general business program leading to immediate employment opportunities, although many students will transfer to 4-year institutions. By carefully selecting the business course electives, a student can generate a concentration in a particular field such as Sales, Retailing, Management, Marketing, or Entrepreneurship (Small Business Management). To identify these courses, students should discuss their interests with their academic advisors. Three such recommended sequences are shown on the following pages.

This program may be taken on a full-time or part-time basis, including on weekends (see College On The Weekend).

**Program supervised by:**

Jan Pitera
Office: Business Building, Room 108
Telephone: 607 778-5493
E-mail: pitera_j@sunybroome.edu

John J. Bunnell
Office: Business Building, Room 218
Telephone: 607 778-5143
E-mail: bunnell_j@sunybroome.edu

Membership of the Business Department Advisory Council consists of representatives from area organizations. The Committee members are selected to serve on a rotating basis and are selected annually with some members remaining on the council for multiple terms.

## General Emphasis

| Courses | | Credits |
|---|---|---|
| BUS 100 | Accounting I/BUS 101 Accounting II | 8 |
| or | | |
| BUS 111 | Financial Accounting/BUS 210 Managerial Accounting | 8 |
| BUS 112 | Quantitative Business Methods | 3 |
| BUS 118 | Business Law I | 3 |
| ENG 110 | College Writing I[5] | 3 |
| BUS 141 | Marketing | 3 |
| BUS 152 | Selling Fundamentals | 3 |
| BUS 269 | Business Reports and Computer Communications | 3 |
| — — | [5]Advisor Approved General Education Course | 3 |
| BUS 120w | Business Law II | 3 |
| BUS | Business Electives | 12 |
| — — | Business Related Electives (see below) | 3 |
| — — | Social Science Elective | 3 |
| ENG | Advisor Approved English | 3 |
| BUS 115 | Business Statistics | 3 |
| PHS 111[1] | Physical Science for Today | 3 |
| — — | Math or Science Elective | 3-4 |
| ECO 110w | Micro Economics | 3 |
| CST 105 | Computer Applications | 3 |
| | or | |
| BUS 181 | The Internet with Business Application | |
| | or | |
| | 3, 1-Credit Approved BIT Electives. | |
| AAS in Marketing/Management | | |
| **Total Credits** | | 68-69 |

[1] Students who are planning to transfer are advised to take a four credit lab science elective.

[2] Recommended.

[3] Take these courses in the semester (spring or fall) indicated. They are not offered in all semesters.

[4] BUS 181, CST 105, CST 158 or approved BIT 1.0 credit courses.

[5] See Advisor: Non general education electives may be acceptable for students not transferring or transferring to non-SUNY colleges.

[6]or ENG 111, based on placement test.

Business related courses choose from BUS, BIT, CST, DMR, MAT, MET, MRP, BNK, BHM, LAW, TTM.

## Entrepreneurship Sequence

| FIRST YEAR | | Hrs/Wk Class | Lab | Cred/Sem |
|---|---|---|---|---|
| **Fall Semester** | | | | |
| BUS100 | Accounting I | | | |
| or | | | | |
| BUS111 | Financial Accounting | 4 | 0 | 4 |
| BUS118 | Business Law I | 3 | 0 | 3 |
| BUS141 | Marketing | 3 | 0 | 3 |
| BUS112 | Quantitative Business Methods | 3 | 0 | 3 |
| BUS107 | Freshman Experience | 1 | 0 | 1 |
| ENG110 | College Writing I | 3 | 0 | 3 |
| | | **17** | **0** | **17** |
| **Spring Semester** | | | | |
| — —[4] | Advisor Approved Computer Elective (see list above) | 3 | 0 | 3 |
| BUS101 | Accounting II | | | |
| or | | | | |
| BUS210 | Managerial Accounting | 4 | 0 | 4 |
| BUS120w | Business Law II | 3 | 0 | 3 |
| — — | Advisor Approved General Education Course[5] | 3 | 0 | 3 |
| | Math/Science Elective | 3-4 | 0 | 3-4 |
| | | **16-17** | **0** | **16-17** |

| SECOND YEAR | | Hrs/Wk Class | Lab | Cred/Sem |
|---|---|---|---|---|
| **Fall Semester** | | | | |
| BUS131 | Personal Finance | 3 | 0 | 3 |
| BUS224[3] | Business Finance | 3 | 0 | 3 |
| — — | Advisor Approved General Education Course[5] | 3 | 0 | 3 |
| PHS111[1] | Physical Science Today | 3-4 | 3 | 3-4 |
| ECO110w | Micro Economics | 3 | 0 | 3 |
| | | **15-16** | **3** | **15-16** |
| **Spring Semester** | | | | |
| BUS229[3] | Advertising | 4 | 0 | 4 |
| BUS263[3] | Small Bus. Seminar | 4 | 0 | 4 |
| BUS246 | Principles of Management | 3 | 0 | 3 |
| ENG | Advisor Approved Eng. | 3 | 0 | 3 |
| Select one of the following: | | | | |
| BUS297[2] | Co-Op | 3 | 0 | 3 |
| or | | | | |
| BUS | Business Elective | 3-4 | 0 | 3-4 |
| | | **17-18** | **0** | **17-18** |

**Total Credits: 65-68**

**NOTE:** This program can be taken on a part-time or weekend basis. See College On The Weekend program on page 28.

## Human Resource Management Sequence

| FIRST YEAR | | Hrs/Wk | | Cred/Sem |
|---|---|---|---|---|
| **Fall Semester** | | **Class** | **Lab** | |
| BUS100 | Accounting I[1] | | | |
| or | | | | |
| BUS111 | Financial Accounting[1] | 4 | 0 | 4 |
| BUS118 | Business Law I | 3 | 0 | 3 |
| BUS141 | Marketing | 3 | 0 | 3 |
| ENG110[6] | College Writing | 3 | 0 | 3 |
| BUS112 | Quantitative Business Methods | 3 | 0 | 3 |
| BUS107 | Freshman Experience | 1 | 0 | 1 |
| | | **17** | **0** | **17** |
| **Spring Semester** | | | | |
| BUS101 | Accounting II[1] | | | |
| or | | | | |
| BUS210 | Managerial Accounting[1] | 4 | 0 | 4 |
| BUS120w | Business Law II | 3 | 0 | 3 |
| BUS248 | Human Resource Management | 3 | 0 | 3-4 |
| — — | Lab Science[2] | 3 | 3 | 3-4 |
| MAT — | Math Elective | 3-4 | 0 | 3-4 |
| | | **16-17** | **3** | **16-18** |

| SECOND YEAR | | Hrs/Wk | | Cred/Sem |
|---|---|---|---|---|
| **Fall Semester** | | **Class** | **Lab** | |
| BUS115 | Business Statistics | 3 | 0 | 3 |
| BUS246 | Principles of Management | 3 | 0 | 3 |
| BUS251 | Advanced Topics of HR Mgt. | 3 | 0 | 3 |
| CST — | Advisor Approved Computer Elective[3] | 3 | 0-2 | 3 |
| — — | Advisor Approved General Education Course[5] | 3 | 0 | 3 |
| ECO110w | Micro-Economics | 3 | 0 | 3 |
| | | **18** | **0-2** | **18** |
| **Spring Semester** | | | | |
| ENG — | Advisor Approved Eng. | 3 | 0 | 3 |
| BUS244 | Employment Law | 3 | 0 | 3 |
| BUS240 | Labor/Mgt. Relations | 3 | 0 | 3 |
| — — | Advisor Approved General Education Course[5] | 3 | 0 | 3 |
| BUS135 | Investments | | | |
| or | | | | |
| BUS131 | Personal Finance | 3 | 0 | 3 |
| | | **15** | **0** | **15** |

**Total Credits: 66-67**

## Marketing Sequence

| FIRST YEAR | | Hrs/Wk | | Cred/Sem |
|---|---|---|---|---|
| **Fall Semester** | | **Class** | **Lab** | |
| BUS100 | Accounting I | 4 | 0 | 4 |
| BUS118 | Business Law I | 3 | 0 | 3 |
| BUS141 | Marketing | 3 | 0 | 3 |
| ENG110 | College Writing I | 3 | 0 | 3 |
| BUS112 | Quantitative Business Methods | 3 | 0 | 3 |
| BUS107 | Freshman Experience | 1 | 0 | 1 |
| | | **17** | **0** | **17** |
| **Spring Semester** | | | | |
| BUS120w | Business Law II | 3 | 0 | 3 |
| BUS248 | Human Resource Management | 3 | 0 | .3 |
| ECO110w | Micro Economics | 3 | 0 | 3 |
| — — | Advisor Approved General Education Course[5] | 3 | 0 | 3 |
| — — | Advisor Approved General Education Course[5] | 3 | 0 | 3 |
| | | **15** | **0** | **15** |

| SECOND YEAR | | Hrs/Wk | | Cred/Sem |
|---|---|---|---|---|
| **Fall Semester** | | **Class** | **Lab** | |
| BUS229[2] | Advertising | 4 | 0 | 4 |
| — —[4] | Advisor Approved Computer Elective (see list) | 2-3 | 0-2 | 3 |
| BUS152 | Selling Fundamentals | 3 | 0 | 3 |
| PHS111[3] | Physical Science for Today | 2 | 2 | 3 |
| BUS | Business Elective | 3-4 | 0 | 3-4 |
| ENG | Advisor Approved Eng. | 3 | 0 | 3 |
| | | **18-19** | **2** | **19-20** |
| **Spring Semester** | | | | |
| BUS129[2] | Consumer Behavior | 3 | 0 | 3 |
| BUS269 | Business Reports & Computer Communications | 3 | 0 | 3 |
| BUS242[2] | Marketing Seminar | 3 | 0 | 3 |
| BUS246 | Principles of Management | 3 | 0 | 3 |
| BUS267[2] | Retailing in a Service Economy | 3 | 0 | 3 |
| — — | Mathematics or Science Elective | 3-4 | 0-3 | 3-4 |
| | | **18-19** | **0-3** | **18-19** |

**Total Credits: 69-71**

[1] See Advisor when selecting

[2] Take these courses in the semester (spring or fall) indicated. They are not offered in all semesters.

[3] Students who are planning to transfer are advised to take a four credit lab science elective.

[4] BUS 181, CST 105, CST 158 or Approved BIT 1.0 Credit Courses.

[5] See Advisor: Non general education electives may be acceptable for students not transferring or transferring to non-SUNY colleges.

[6] or ENG 111, based on placement test.

**Program supervised by:**

John Petrewski
Office: Mechanical Building, Room 117
Telephone: 607 778-5010
E-mail: petrewski_j@sunybroome.edu

**Curriculum Advisory Council: Mechanical Engineering Technology**

FRED BASMAJIAN / BAE Systems
W. ALLYN JONES / J&K Plumbing and Heating
STEVE KEPPLER / IBM Corporation
CARL LUNDGREN / Rochester Institute of Technology
BERNARD MANDERVILLE / Universal Instruments Corp.
JEFF MONICO / The Raymond Corporation
THOMAS PHILLIPS / Phillips Foundry
JOHN WITINSKI / Empire Plastics

**Cooperative Work Experience**

Selected students can receive on-the-job experience directly related to the Mechanical Engineering Technology field by registering for MET298 Cooperative Work Experience. To be eligible, students must be registered full-time in the MET Department, have a GPA of at least 2.2 with no 'F' grades, and have completed at least 24 credit hours.

# Mechanical Engineering Technology

## Associate in Applied Science

The Mechanical Engineering Technology program is specifically designed to prepare students in the applied aspects of engineering. Mechanical Engineering Technology is a vital part of the engineering field. It requires the application of scientific and engineering knowledge combined with practical technical skills and methods in support of engineering activities. The program emphasizes the application of engineering principles to real-world industrial problems utilizing current up-to-date equipment and techniques.

Mechanical Engineering Technology is the broadest of all engineering technology disciplines. Graduates are able to pursue careers in many segments of industry, with starting salaries averaging over $30,000 per year.

The Mechanical Engineering Technology program at Broome Community College is divided into four major areas: Engineering Materials, Fluid Mechanics and Thermodynamics, Mechanical Drawing and Design — CAD, and Manufacturing Processes and Quality Control.

The program is designed to prepare graduates for their profession by providing a solid background in the major areas of Mechanical Engineering Technology, but also allows students to continue towards a Baccalaureate Degree at various colleges and universities.

The Mechanical Engineering Technology program is accredited by the Technology Accreditation Commission of the Accreditation Board of Engineering and Technology (TAC/ABET).

SEQUENCE OF COURSES: This model is a two-year course schedule for students meeting all program requirements and deciding to pursue full-time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part-time study.

| FIRST YEAR | | | Hours/Week | | Credits/Semester |
|---|---|---|---|---|---|
| **Fall Semester** | | | Class | Lab | |
| CST | 106 | Computers in Technology | 2 | 2 | 3 |
| ENG | 110 | Written Expression | 3 | 0 | 3 |
| MAT | 130[1] | Applied Algebra & Trigonometry | 4 | 0 | 4 |
| MET | 113 | Engineering Drawing I w/CAD | 1 | 3 | 2 |
| TEC | 100 | Technology Orientation | 0 | 1 | .5 |
| MET | 121 | Manufacturing Processes I | 1 | 3 | 2 |
| Soc. Sci. Elective | | | 3 | 0 | 3 |
| | | | **14** | **9** | **17.5** |
| **Spring Semester** | | | | | |
| MET | 122 | Manufacturing Processes II | 2 | 3 | 3 |
| ENG | 150 | Technical Writing | 3 | 0 | 3 |
| MET | 116 | Engineering Drawing II w/CAD | 2 | 3 | 3 |
| MET | 134 | Statics | 3 | 0 | 3 |
| PHY | 161 | Physics I | 3 | 3 | 4 |
| MET | 164 | Quality Systems | 1 | 3 | 2 |
| | | | **14** | **12** | **18** |
| **SECOND YEAR** | | | | | |
| **Fall Semester** | | | | | |
| MET | 235 | Strength of Materials | 2 | 3 | 3 |
| MET | 243W | Fluid Mechanics | 2 | 3 | 3 |
| MET | 211 | Mechanical CAD | 1 | 2 | 2 |
| MET | 234 | Dynamics | 1 | 2 | 2 |
| MAT | 160[1] | Applied Calculus I | 4 | 0 | 4 |
| SOS | 120 | Science, Tech. & Demo. Society | 3 | 0 | 3 |
| | | | **13** | **10** | **17** |
| **Spring Semester** | | | | | |
| MET | 238 | Mechanical Design | 3 | 3 | 4 |
| MET | 252 | Engineering Materials | 3 | 3 | 4 |
| MET | 244 | Thermodynamics | 2 | 3 | 3 |
| EET | 210 | Electricity & Electronics | 3 | 3 | 4 |
| PHY | 162 | Physics II | 3 | 3 | 4 |
| MET | 200 | Senior Seminar | 0 | 2 | 0 |
| | | | **14** | **17** | **19** |

**GRADUATION REQUIREMENTS: 71.5 CREDITS**

[1]Or MAT 181-182 Calculus I and II. Prior approval by Department Chairperson required.

# Medical Assistant

### Associate in Applied Science

A Medical Assistant is one of the most versatile of all the allied health professionals. Graduates find positions in physicians' offices, medical centers, clinics, hospitals, armed services, laboratories and pharmaceutical companies. The program is designed to enable graduates to do both administrative and clinical/laboratory techniques.

Students in the program acquire the knowledge and necessary techniques to prepare patients for examinations and to assist the physician in performing not only routine medical procedures but also electrocardiography, audiometry, urinalysis and hematological tests.

Courses in medical terminology, keyboarding, medical correspondence and medical office management, prepare the student to conduct business and administrative duties.

Directed Practice is an integral part of the curriculum as senior students participate in a 15-week, externship program that requires a working experience in physicians' offices or other health care facilities.

Graduates may elect to take a national examination given by the AAMA to become Certified Medical Assistants.

SEQUENCE OF COURSES: This model is a two-year course schedule for students meeting all program requirements and deciding to pursue full-time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part-time study.

| FIRST YEAR | | Hours/Week | | Credits/Semester |
|---|---|---|---|---|
| **Fall Semester** | | Class | Lab | |
| BIO 131 | Human Biology I | 3 | 2 | 4 |
| ENG 110 | College Writing I | 3 | 0 | 3 |
| MDA 102 | Medical Assisting Science | 2 | 0 | 2 |
| MDA 104 | Keyboarding and Medical Word Processing | 3 | 0 | 3 |
| MDA 114 | First Aid & Personal Safety: Management of Emergencies | 0 | 2 | 1 |
| HIT 106 | Medical Terminology | 3 | 0 | 3 |
| | | **14** | **4** | **16** |
| **Spring Semester** | | | | |
| BIO 132 | Human Biology II | 3 | 2 | 4 |
| MDA 115 | Medical Assisting Procedures I | 3 | 2 | 4 |
| MDA 206 | Medical Office Management | 3 | 2 | 4 |
| SOC SCI/Civic elective | | 3 | 0 | 3 |
| | | **12** | **6** | **15** |
| **SECOND YEAR** | | | | |
| **Fall Semester** | | | | |
| MDA 106 | Medical Transcription and Correspondence | 4 | 0 | 4 |
| MDA 208 | Medical Ethics, Law and Economics | 3 | 0 | 3 |
| MDA 201 | Medical Assisting Prodecures II | 2 | 4 | 4 |
| PSY 110w | General Psychology | 3 | 0 | 3 |
| MDA 207 | Advanced Medical Office Management | 3 | 2 | 4 |
| | | **15** | **6** | **18** |
| **Spring Semester** | | | | |
| MDA 211 | Medical Assisting Procedures III | 3 | 2 | 4 |
| MDA 245 | Directed Practice & Seminar | 1 | 0 | 1 |
| MDA 210 | Pharmacology | 2 | 0 | 2 |
| MDA 246 | Clinical Affiliation I | 0 | 8 | 4 |
| MDA 247 | Clinical Affiliation II | 0 | 8 | 4 |
| ENG 220 | Communicating About Ideas and Values | 3 | 0 | 3 |
| | | **9** | **18** | **14** |

**GRADUATION REQUIREMENTS: 67 CREDITS**

**Program supervised by:**

Andrea C. Wade
Office: Decker Center, Room 217
Telephone: 607 778-5261
E-mail: wade_a@sunybroome.edu

**Curriculum Advisory Council: Medical Assistant**

DR. BRUCE BOWLING / Chief Medical Advisor, Endwell Family Physicians
CINDY BURGER / Exec. Director, Medical Societies of Broome, Chemung, Delaware and Otsego Counties
RACHELLE CAROLL / Tier Orthopedic Assoc. PC
ANDREA WADE / Chairperson, Medical Technology/Medical Assistant
THERESA GAVAZZI, M.S., CMA
BEA GRACE, R.N. / Endwell Family Physicians
DEMETRIO A. PEGUERO, M.D. / IBM
DIANA PIGOS, C.M.A. / Endwell Family Physicians
ANN PULANO / Vestal Medical Assoc.
CATHERINE E. SCHULDT, CMA / Instructor, BCC

**ALL STUDENTS MUST HAVE CPR CERTIFICATION and a physical before going out to clinical in senior semester.**

**For important general information regarding Health Science curricula, see pages 11 and 23.**

# Medical Laboratory Technology

### Associate in Applied Science

**Program Supervised by:**

Andrea C. Wade
Office: Decker Center, Room 217
Telephone: 607 778-5211
E-mail: wade_a@sunybroome.edu

**Curriculum Advisory Council: Medical Laboratory Technology**

ANDREA C. WADE, Ph.D., MT(ASCP) / Broome Community College
JEANNINE BONHOFF MT(ASCP) / M.I. Bassett Hospital
SUSAN S. GRAHAM, MS, MT(ASCP)SH
BARBARA LAWRENCE, MBA, MT(ASCP) / Arnot Ogden Medical Center
LINDA REDMOND, MS, MT(ASCP) / Lourdes Hospital
JOHN WALTERS, BS / United Health Services
HARRY WANDELL, M.Ed., MT(ASCP) / Broome Community College
LOREN WOLSH, MD / United Health Services

Medical Technicians perform biological tests in search of diagnostic clues as evidence of health or disease. In the search for data on a patient's health, people working in this field may examine specimens through a microscope or perform, for example, the tests necessary to match a donated unit of blood to a patient in need of that unit. They may identify the microorganisms associated with health and disease. They are also competent operators of the computers and complex instrumentation which are used in most areas of today's laboratories.

The Medical Technician plays a vital role in patient care by performing the full range of laboratory testing in six major areas of the laboratory: Hematology, Immunology, Microbiology, Body Fluids, Blood Banking, and Chemistry. Technicians may choose to advance, by education or experience, to the levels of Medical Technologist or specialist.

Employment may be found in hospital laboratories, physician offices, clinics, commercial firms such as pharmaceutical companies, all types of research facilities, the armed forces, public health centers, and veterinary clinics.

Wherever they work, the technicians and technologist in this field share a strong desire to help others, a love of challenge and responsibility, and the ability to complete a wide variety of scientific tests accurately and reliably.

Pre-admission advisement is recommended.

MEDICAL LABORATORY TECHNOLOGY - CURRICULUM REQUIREMENT: The following coursework must be successfully completed to earn to A.A.S. degree in Medical Laboratory Technology.

| FIRST YEAR | | | Hours/Week | | Credits/Semester |
|---|---|---|---|---|---|
| **Fall Semester** | | | Class | Lab | Credits |
| BIO | 131 | Human Biology I | 3 | 2 | 4 |
| CHM | 145 | Chemistry I | 3 | 3 | 4 |
| ENG | 110 | College Writing I | 3 | 0 | 3 |
| MAT | 124 | Statistics I | 3 | 1 | 3 |
| MLT | 110 | Introduction to Medical Laboratory Technology (5 wks) | 3 | 0 | 1 |
| MLT | 120 | Medical Laboratory Techniques and Practices (10 wks) | 2 | 1 | 1 |
| | | Social Science Elective | 3 | 0 | 3 |
| | | | | | **19** |
| **Spring Semster** | | | | | |
| BIO | 132 | Human Biology II | 3 | 2 | 4 |
| CHM | 146 | Chemistry II | 3 | 3 | 4 |
| MLT | 201 | Hematology/Coagulation | 3 | 4 | 4 |
| MLT | 202 | Urinalysis | .75 | .75 | 1 |
| MLT | 204 | Fund. Phlebotomy (5 wks) | 3 | 0 | 1 |
| | | Civic Education Elective | 3 | 0 | 3 |
| | | | | | **17** |

| SECOND YEAR | | | | | |
|---|---|---|---|---|---|
| **Fall Semester** | | | | | |
| CHM | 133 | Survey of Organic Chem | 2 | 3 | 3 |
| CHM | 220 | Intro to Instrumental Analysis | 1 | 3 | 2 |
| LIT | 200 | Intro to Literature or equiv | 3 | 0 | 3 |
| MLT | 207 | Clinical Chemistry | 3 | 6 | 5 |
| MLT | 208 | Pathogenic Microbiology | 3 | 0 | 3 |
| MLT | 210 | Diagnostic Microbiology Lab | 2 | 4 | 3 |
| | | | | | **19** |

| **Spring Semester** | | | Hours/Day | | | No. of | |
|---|---|---|---|---|---|---|---|
| | | | Class | Lab | Clinical | Weeks | Credits |
| MLT | 205 | Immunology | 4 | 2 | 0 | 2 | 3 |
| MLT | 206 | Immunohematology | 4 | 2 | 0 | 2 | 3 |
| MLT | 240 | Clinical Affiliation I | 0 | 0 | 8 | 5 | 5 |
| MLT | 241 | Clinical Affiliation II | 0 | 0 | 8 | 4 | 4 |
| MLT | 242 | Clinical Affiliation III | 0 | 0 | 8 | 2 | 2 |
| | | | | | | | **17** |

**GRADUATION REQUIREMENTS: 72 CREDITS**

**For important general information regarding Health Science curricula, see pages 11 and 23.**

# Medical Transcription

## Certificate Program

Medical Transcriptionists understand and use medical terms, appropriate reference materials, word processing equipment and software to transcribe medical reports dictated by physicians and other health care professionals.

Medical transcriptionists work in a variety of settings, including Medical Record Departments and ancillary professional departments of hospitals (e.g. radiology, pathology, etc.), clinics, doctors' offices, private transcription businesses and other health care facilities.

**Program supervised by:**

Mary L. Rosato
Office: Decker Center, Room 217
Telephone: 607 778-5051
E-mail: rosato_m@sunybroome.edu

| | | | Hours/Week | | Credits/Semester |
|---|---|---|---|---|---|
| **First Semester** | | | Class | Lab | |
| BIO | 131 | Human Biology I | 3 | 2 | 4 |
| HIT | 106[2] | Medical Terminology | 3 | 0 | 3 |
| HIT | 107[2] | Medical Transcription and Correspondence | 4 | 0 | 4 |
| ENG | 110 | College Writing I | 3 | 0 | 3 |
| | **OR** | | | | |
| BIT | 110 | Business English | 3 | 0 | 3 |
| BIT | 100[1] | Keyboarding | 2 | 3 | 3 |
| | **OR** | | | | |
| MDA | 104 | Keyboarding & Medical Word Processing | 3 | 0 | 3 |
| | | | **15/16** | **5** | **17** |
| **Second Semester** | | | | | |
| BIO | 132 | Human Biology II | 3 | 2 | 4 |
| HIT | 208[2] | Advanced Medical Transcription | 4 | 0 | 4 |
| HIT | 222 | Medical Legal Aspects | 3 | 0 | 3 |
| | **OR** | | | | |
| MDA | 208 | Medical Ethics, Law & Economics | 3 | 0 | 3 |
| MDA | 210 | Pharmacology | 2 | 0 | 2 |
| | | | **12** | **2** | **13** |

**Additional Courses**

| | | |
|---|---|---|
| BIO | 140 | Pathophysiology |
| CST | | Any computer course dealing with word processing. |

[1]Students who have achieved 35 words/min with fewer than 5 errors on placement test may waive this requirement.

[2]Students wishing to receive a profiency award from the College may elect to take minimum core courses.

**Program supervised by:**

Claire Ligeikis-Clayton
Office: Decker Center, Room 217
Telephone: 607 778-5060
E-mail: ligeikis_c@sunybroome.edu

**Curriculum Advisory Council: Nursing**

MICHELLE AMES / Director BOCES LPN Program
FRAN ANDERSON / Researcher - Our Lady of Lourdes Hospital
EILEEN COONEY / Director of Nursing, Elizabeth Church Manor
JANET DENMAN / BCC Nursing Faculty
SALLY HOFFMAN / Lourdes Home Care
ANASTASIA KALECHITZ / Graduate of BCC Nursing Program
CLAIRE LIGEIKIS-CLAYTON / Chairperson, BCC Department of Nursing, Broome Community College
DEBBIE LIS / Director of Nursing Education, UHS
TRICIA NEWLAND / BCC Nursing Faculty
JULIA PEACOCK / Dean of Applied Sciences, Broome Community College
JUDY SAMSELL / BCC Nursing Faculty
BLENDA SMITH / Binghamton University - Nursing Faculty
CINDY STEVENS / BCC Nursing Faculty
JANET ZELESNIKAR / Nurse Recruiter - United Health Services

# Nursing

## *Associate in Applied Science*

Broome Community College Department of Nursing offers a college-based curriculum to prepare graduates for immediate entrance into the entry level of registered nursing. This program is accredited by the National League for Nursing Accrediting Commission and registered by the New York State Education Department. Graduates of this curriculum are eligible to take the national licensing examination for registered nurses. They are qualified for immediate employment in long term, acute care, home care, private medical offices, health maintenance organizations and clinic settings with salaries ranging from $32,460 to $43,680. Graduates may continue their education for the baccalaureate and higher degrees in the nursing field. BCC Nursing Department has articulation agreements with a variety of Bachelor of Science Nursing schools which makes transfer to these programs a smooth transition.

LPNs may apply for direct transfer credit and/or challenge first year nursing courses.

SEQUENCE OF COURSES: This model is a two-year course schedule for students meeting all program requirements and deciding to pursue full-time study. Schedules will be redesigned for those requiring preparatory courses. These students who wish part-time study may do so.

| FIRST YEAR | | | Hours/Week | | | Credits/Semester |
|---|---|---|---|---|---|---|
| **Fall Semester** | | | Class | Clinical | Lab | |
| ADN | 105 | Meeting Human Needs I | 4 | 6 | 2 | 7 |
| BIO | 131 | Human Biology I | 3 | 0 | 2 | 4 |
| PSY | 110 | General Psychology | 3 | 0 | 0 | 3 |
| ENG | 110 | College Writing I | 3 | 0 | 0 | 3 |
| | | | | | | **17** |
| **Spring Semester** | | | | | | |
| ADN | 106W | Meeting Human Needs II | 4 | 6 | 2 | 7 |
| ADN | 298[4] | Nursing Seminar | (1) | 0 | 0 | (1) |
| BIO | 132 | Human Biology II | 3 | 0 | 2 | 4 |
| PSY | 210W | Human Development | 3 | 0 | 0 | 3 |
| Social Science | | | 3 | 0 | 0 | 3 |
| MDA | 210 | Pharmacology | 2 | 0 | 0 | 2 |
| | | | | | | **19(20)** |
| **SECOND YEAR** | | | | | | |
| **First Semester** | | | | | | |
| ADN | 211 | Meeting Human Needs III | 4.5 | 6 | 1.5 | 7 |
| ADN | 212 | Meeting Human Needs IV | 4.5 | 6 | 1.5 | 7 |
| ADN | 298 | Nursing Seminar | (1) | 0 | 0 | (1) |
| BIO | 150 | Microbiology | 3 | 0 | 2 | 4 |
| or MLT | 208/209 | Pathogenic Microbiology | 3 | 0 | 2 | 4 |
| | | | | | | **18(19)** |
| **Spring Semester** | | | | | | |
| ADN | 213 | Meeting Human Needs V | 4.5 | 6 | 1.5 | 7 |
| ADN | 214 | Meeting Human Needs VI | 4.5 | 6 | 1.5 | 7 |
| ENG | 220 | Communicating About Ideas and Values | 3 | 0 | 0 | 3 |
| | | | | | | **17** |

**GRADUATION REQUIREMENTS: 71 CREDITS**

**Notes:**

1. In order to progress, students must complete assignments in the Nursing Skills Center. Nursing Skills Center assignments are completed outside of class and clinical times.
2. Each student enrolled in Nursing must meet the mathematics proficiency requirements at selected intervals during the program.
3. Clinical experiences for Nursing students are scheduled by the Nursing Department and include days, evenings, and weekends. Students are responsible for providing their own transportation to clinical and community facilities in Broome and surrounding counties.

   Clinical components run concurrently with lecture. In order to progress, students must pass the clinical component which corresponds with each theory course.
4. ADN 298, Nursing Seminar, is required of all returning, transfer, and challenge students.
5. The Nursing program must be completed within 4 academic years of the date of enrollment in Nursing Courses.
6. In order to be eligible for licensure as a registered professional nurse, graduates must meet the criteria for good moral character as determined by New York State Education Department. Candidates do not need to be a U.S. citizen.
7. Students must receive a "C" or better in all Nursing, Biology, and Pharmacology courses in order to progress in the Program.
8. See department chairperson for list of required competencies for the program.

**For important general information regarding Health Science curricula, see pages 11 and 23.**

# Evening Weekender Program in Nursing

For entry into the Evening/Weekender Program in Nursing, it is suggested that students complete required Liberal Arts and Sciences courses prior to nursing courses.

## Sample Nursing Course Sequencing

| FIRST YEAR | Hours/Week | | | Credits/Semester |
|---|---|---|---|---|
| **Spring Semester** | Class | Clinical | Lab | |
| ADN 105 Meeting Human Needs I | 4 | 6 | 2 | 7 |
| *Co-requisites (or taken previously): ENG 110, PSY 110 & BIO 131* | | | | |
| **Fall Semester** | | | | |
| ADN 106 Meeting Human Needs II | 4 | 6 | 2 | 7 |
| *Pre-requisite: ADN 105* | | | | |
| *Co-requisites (or taken previously): BIO 132, MDA 210* | | | | |
| **SECOND YEAR** | | | | |
| **Spring Semester** | | | | |
| ADN 211* Meeting Human Needs III | 4.5 | 6 | 1.5 | 7 |
| **Fall Semester** | | | | |
| ADN 212* Meeting Human Needs IV | 4.5 | 6 | 1.5 | 7 |
| **THIRD YEAR** | | | | |
| **Spring Semester** | | | | |
| ADN 214* Meeting Human Needs V | 4.5 | 6 | 1.5 | 7 |
| **Fall Semester** | | | | |
| ADN 213* Meeting Human Needs V | 4.5 | 6 | 1.5 | 7 |
| **Pre-requisites: PSY 210, ADN 106, BIO 132, MDA 210* | | | | |
| *ADN 211-214 may be sequenced differently* | | | | |

**GRADUATION REQUIREMENTS: 71 CREDITS**

Nursing courses are offered 2 evenings per week and every other weekend (Sat & Sun)

**Program supervised by:**
Claire Ligeikis-Clayton
Office: Decker Center, Room 217
Telephone: 607 778-5060
E-mail: ligeikis_c@sunybroome.edu

**Curriculum Advisory Council listed on page 96.**

**Program supervised by:**
Marie A. Davenport
Office Business Building, Room 107
Telephone: 607-778-5008
E-mail: davenport_m@mail.sunybroome.edu

**Curriculum Advisory Council: Business Information Technology**

Membership of the Business Information Technology Advisory Council consists of representatives from area organizations. The Council members are selected to serve on a rotating basis with some members remaining on the Council for multiple terms.

**See also: Business Information Management pg. 44**

# Office Administration

## Associate in Applied Science

Students in this program concentrate their studies in areas such as computer applications, information processing, business communications, and office management. Graduates are prepared to handle the basic operations and administrative duties of the integrated electronic office. By careful selection of electives, students may be exposed to specific office environments, such as medical or legal offices.

Students interested in obtaining skills or knowledge in a particular field without committing to a full-time degree program may earn a certificate of achievement by completing three to five required courses in areas such as computer applications, business communications, or office management. Interested students should contact the Business Information Technology chairperson for more information.

SEQUENCE OF COURSES: This model is a two-year course schedule for students meeting all program requirements and deciding to pursue full-time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part-time study.

| FIRST YEAR | | | Hours/Week Class | Lab | Credits/Semester |
|---|---|---|---|---|---|
| **Fall Semester** | | | | | |
| BIT | 100 | Keyboarding | 3 | 0 | 3 |
| BIT | 110 | Business English | 3 | 0 | 3 |
| BUS | 112[1] | QBM | 3 | 0 | 3 |
| ENG | 110 | College Writing I | 3 | 0 | 3 |
| | | Social Science Elective[2] | 3 | 0 | 3 |
| | | | **15** | **0** | **15** |
| **Spring Semester** | | | | | |
| BIT | 130 | Word Processing | 3 | 0 | 3 |
| BIT | 140w | Business Communications | 3 | 0 | 3 |
| SPK | 110 | Effective Speaking | 3 | 0 | 3 |
| BIM | 100 | Intro. To Business Information Mgmt. | 3 | 0 | 3 |
| | | Lab Science Elective | 2 | 2 | 3 |
| ENG | 111 | College Writing II | 3 | 0 | 3 |
| | | | **17** | **2** | **18** |
| **SECOND YEAR** | | | | | |
| **Fall Semester** | | | | | |
| BIT | 104 | Keyboarding/Skill Building | 1 | 0 | 1 |
| BIT | 200 | Spreadsheets with Bus. Appl. | 3 | 0 | 3 |
| BIT | 255 | Business Integrated Office Appl. | 3 | 0 | 3 |
| BIT | 270w | Personal & Professional Dev. | 3 | 0 | 3 |
| BUS | 108 | Accounting for a Service Business | 4 | 0 | 4 |
| BIT | | Elective | 3 | 0 | 3 |
| | | | **17** | **0** | **17** |
| **Spring Semester** | | | | | |
| BIT | 275 | Advanced Business Communications | 3 | 0 | 3 |
| BIT | 280 | Office Administration | 3 | 0 | 3 |
| BIT | 297 | Internship | 2 | 0 | 2 |
| BIT | | Elective | 3 | 0 | 3 |
| | | Social Science Elective[2] | 3 | 0 | 3 |
| | | MAT/SCI Elective | 3 | 0 | 3 |
| | | | **17** | **0** | **17** |

**Total Credits: 67**

[1]Depending on Mathematics entrance testing scpores, the student will take MAT 090 and/or BUS 112.

Students should check with their advisor during the scheduling process to make sure courses are taken in proper sequence and any prerequisites have been met. Some flexibility is available as to when courses must be taken, but not all courses are offered every semester.

[2]Advisor approved General Education Elective

w - Writing Emphasis Course

# Office Technology

## Certificate Program

The Office Technology Certificate program allows students the flexibility to design a program that will best meet their needs. Students completing the 30-credit Certificate Program must have earned 15 credits from the Business Information Technology Departmental offerings and an additional 15 credits from any subject area — including Business Information Technology. With proper planning and advisement, students may be able to apply the 30 credits earned toward an AAS degree in Office Administration or Individual Studies.

SEQUENCE OF COURSES: This model is a one-year course schedule for students pursuing full-time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part-time study.

**Office Technology Core Courses (suggested, not required - total of 15)**

Keyboarding (BIT 100)
World Processing (BIT 130)
Spreadsheets with Business Applications (BIT 200)
Business English (BIT 110)
Business Communications (BIT 140W)

Plus 15 additional credits in a specific Career Concentration — 2 examples follow:

**Advanced Office Technology Concentration (suggested, not required - total 15 credits)**
Document Formatting (BIT 120)
Introduction to Business Information Management (BIM 100)
Integrated Businesss Office Applications (BIT 255)
Machine Transcription (BIT 210)
Cooperative Work Experience (BIT 197)

**Office Administration Concentration (suggested, not required - total 15 credits)**

Project Management (BIT 265)
Personal and Professional Development (BIT 270)
Advanced Business Communications (BIT 275)
Office Administration (BIT 280)
Cooperative Work Experience (BIT 197)

**Program supervised by:**
Marie A. Davenport
Office Business Building, Room 107
Telephone: 607-778-5008
E-mail: davenport_m@mail.sunybroome.edu

**Curriculum Advisory Council: Business Information Technology**
Membership of the Business Information Technology Advisory Council consists of representatives from area organizations. The Council members are selected to serve on a rotating basis with some members remaining on the Council for multiple terms.

**Program supervised by:**

Jan Pitera
Office: Business Building, Room 108
Telephone: 607 778-5493
E-mail: pitera_j@sunybroome.edu

Gerald A. Loy, Esq.
Office: Business Building, Room B-216A
Telephone: 607 778-5300
E-mail: loy_g@sunybroome.edu

# Paralegal

## Associate in Applied Science[1]

The Paralegal Studies program is designed to introduce students to the substantive and practical aspects of the paralegal function, leading to an Associate in Applied Science degree. The program emphasizes both the theory and the practice of paralegal procedures essential for employment in a law office or other legal settings. The program can be pursued on a full or part-time basis, day and evening.

Students wishing to transfer to four-year schools as pre-law majors should consult the Business Department.

SEQUENCE OF COURSES: This model is a two-year course schedule for students meeting all program requirements and deciding to pursue full-time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part-time study.

| FIRST YEAR | | Hours/Week | | Credits/Semester |
|---|---|---|---|---|
| **Fall Semester** | | Class | Lab | |
| BUS 100/108/111 | Accounting[4] | 4 | 0 | 4 |
| BUS 107 | Freshman Experience | 1 | 0 | 1 |
| BUS 112 | Quantitative Business Methods | 3 | 0 | 3 |
| BUS 118 | Business Law I | 3 | 0 | 3 |
| BUS 141 | Marketing | 3 | 0 | 3 |
| ENG 110 | Written Expression I | 3 | 0 | 3 |
| | | **17** | **0** | **17** |
| **Spring Semester** | | | | |
| PSY 110 or SOC 110 | | 3 | 0 | 3 |
| — — | Business Elective | 3 | 0 | 3 |
| LAW 200 | Real Property Law | 3 | 0 | 3 |
| — — | Paralegal Elective | 3 | 0 | 3 |
| LAW 110 | Survey of Paralegalism | 3 | 0 | 3 |
| | | **15** | **0** | **15** |
| **SECOND YEAR** | | | | |
| **Fall Semester** | | | | |
| LAW 207w | Legal Writing and Research | 3 | 0 | 3 |
| LAW 215 | Estates, Probates and Trusts | 3 | 0 | 3 |
| — — | Math/Science Elective[2] | 3-4 | 0 | 3-4 |
| — — | Business Elective | 3 | 0 | 3 |
| — — | Social Science Elective[3] | 3 | 0 | 3 |
| — — | Free Elective | 3 | 0 | 3 |
| | | **18-19** | **0** | **18-19** |
| **Spring Semester** | | | | |
| ENG | Advisor Approved English Course | 3 | 0 | 3 |
| — — | Paralegal Elective | 3 | 0 | 3 |
| — — | Paralegal Elective | 3 | 0 | 3 |
| — — | Paralegal Elective | 3 | 0 | 3 |
| — — | Math/Science Elective[2] | 3 | 0 | 3 |
| — — | Arts/Science Elective | 3 | 0 | 3 |
| | | **18** | **0** | **18** |

**Total Credits: 68-69**

**[1]A Paralegal certificate is available to students who complete a predetermined selection of courses on this page. Please contact the program coordinator, above, for more information.**

Students should check with their advisors during the scheduling process to make sure courses are taken in proper sequence and any prerequisites have been met. Some flexibility is available as to when courses must be taken, but not all courses are offered every semester.

[2]Recommended Math/Sciences: MAT 113/114/124, PHS 111

[3]Choose one from the following: ECO 110/111, SOC 110/111, POS 201/204, SOS 111/120/130.

[4]See Advisor

# Phlebotomy

## Certificate Program

The Phlebotomy Certificate curriculum prepares students for entry-level positions in hospitals, clinics and other health care settings, collecting blood samples from patients, performing related technical procedures and processing the associated clerical tasks. As vital members of the health care team, phlebotomists work closely with patients and require good communication and organizational skills. To be successful, phlebotomists should be practical and accurate, able to inspire confidence in others and to put patients at ease. Phlebotomists need to be skilled at collecting blood and other specimens correctly to procure high quality specimens for laboratory analysis. The Phlebotomy Certificate program emphasizes a combination of phlebotomy theory and practical application necessary for successful employment.

Graduates may qualify for employment in hospitals, clinics, physicians' offices, and other health care settings. After completing requirements, graduates are eligible to sit for a national certification exam.

**Phlebotomy - Curriculum Requirements**

The following coursework must be successfully completed to earn a certificate in Phlebotomy.

| | | | Hours/Week | | Credits/Semester |
|---|---|---|---|---|---|
| **First Semester** | | | Class | Lab | Credits |
| BIO | 131 | Human Biology I | 3 | 2 | 4 |
| HIT | 106 | Medical Terminology | 3 | 0 | 3 |
| ENG | 110 | College Writing I | 3 | 0 | 3 |
| MDA | 208 | Medical Ethics and Law | 3 | 0 | 3 |
| | | Or HIT 222 Medical Legal Aspects | | | |
| MLT | 110 | Introduction to Medical Laboratory Technology (5 wks) | 3 | 0 | 1 |
| | | | | | 14 |
| **Spring Semester** | | | | | |
| MLT | 204 | Fund. Phlebotomy (5 wks) | 3 | 0 | 1 |
| MLT | 214 | Spec. Phlebotomy (10 wks) | 3 | 0 | 2 |
| MLT | 215 | Phlebotomy Practicum | 160 hrs | 0 | 5 |
| CST | 105 | Computer Applications | 2 | 2 | 3 |
| | | Or MDA 104 Keyboarding and Medical Word Processing<br>Or BIT 169 Mastering the Internet and the WWW | | | |
| SPK | 110 | Effective Speaking | 3 | 0 | 3 |
| | | Or ENG 220 Communicating About Ideas and Values | | | |
| | | | | | 14 |

**GRADUATION REQUIREMENTS: 28 CREDITS**

**Program supervised by:**
Andrea C. Wade
Office: Decker Center, Room 217
Telephone: 607 778-5211
E-mail: wade_a@sunybroome.edu

**For important general information regarding Health Science curricula, see pages 11 and 23.**

# Physical Therapist Assistant

## Associate in Applied Science

The Physical Therapist Assistant (PTA) is a skilled health technician who works under the supervision of a Physical Therapist. Treatments provided by the PTA include exercises for increasing strength, endurance, coordination and range of motion; the use of heat, cold, electricity, sound and water to relieve pain and stimulate muscle activity; instruction in activities of daily living and the use of assistive devices such as walkers, crutches and wheelchairs. Work settings include hospital, nursing home, rehabilitation center and private practice.

The Physical Therapist Assistant Program at BCC is not designed as a transfer program to an upper division Physical Therapy Program.

Clinical Education is a necessary component of the program. Clinical Education may be out of town and students are responsible for their own housing and transportation. Because of the need to schedule large blocks of time for the clinical education courses, it may not be possible for students to pursue this program on a part-time basis. In addition, students may be required to travel some distance from home to meet this obligation.

SEQUENCE OF COURSES: The following coursework must be successfully completed to earn the A.A.S. degree in Physical Therapist Assistant: (Note: courses are sequential and have pre-requisites.)

| FIRST YEAR | | | Hours/ Week | | Hours/ Semester | Credits/ Semester |
|---|---|---|---|---|---|---|
| **Fall Semester** | | | Class | Lab | Clinical | |
| BIO | 131 | Human Biology I | 3 | 2 | 0 | 4 |
| ENG | 110 | College Writing I | 3 | 0 | 0 | 3 |
| PSY | 110 | General Psychology | 3 | 0 | 0 | 3 |
| PTA | 100 | Intro to Physical Therapy I | 4 | 0 | 0 | 4 |
| PTA | 104 | Basic Musculoskeletal Anatomy | 1 | 0 | 0 | 1 |
| PHY | 118 | Physics for Physical Therapist Asst. | 3 | 2 | 0 | 4 |
| | | | **17** | **4** | **0** | **19** |
| **Spring Semester** | | | | | | |
| BIO | 132 | Human Biology II | 3 | 2 | 0 | 4 |
| PSY | 210W | Human Development | 3 | 0 | 0 | 3 |
| PTA | 101 | Intro to Physical Therapy II | 4 | 0 | 0 | 4 |
| PTA | 102 | Intro to Rehabilitation | 3 | 3 | 0 | 4 |
| PTA | 103 | Physical Agents and Massage | 3 | 3 | 0 | 4 |
| MDA | 114 | Standard First Aid Management of Emergencies | 0 | 2 | 0 | 1 |
| | | | **16** | **10** | **0** | **20** |
| **Summer Term** | | | | | | |
| PTA | 110 | Clinical Affiliation I | 30 | (3 wks.) | 90 | **2** |
| **Fall Semester** | | | | | | |
| PTA | 201 | Kinesiology | 3 | 3 | 0 | 4 |
| PTA | 202 | Therapeutic Exercise | 3 | 3 | 0 | 4 |
| PTA | 210 | Clinical Affiliation II | 36 | (5 wks.) | 180 | 4 |
| ENG | 220 | Communicating About Ideas and Values | 3 | 0 | 0 | 3 |
| | | | **9** | **6** | **180** | **15** |
| **Spring Semester** | | | | | | |
| PTA | 213W | Senior Seminar I | 12 | (7 wks.) | 0 | 5 |
| PTA | 224 | Senior Seminar II | 12 | (2 wks.) | 0 | 1 |
| PTA | 220 | Clinical Affiliation III | 40 | (6 wks.) | 240 | 6 |
| Elective | | General Education Requirement | 3 | 0 | 0 | 3 |
| | | | | **(12 wks.)** | **240** | **15** |

**GRADUATION REQUIREMENTS: 71 CREDITS**

**Program supervised by:**

Denise M. Abrams, PT
Office: Decker Center, Room 217
Telephone: 607 778-5211
E-mail: abrams_d@sunybroome.edu

**Curriculum Advisory Council: Physical Therapist Assistant**

CAROL CASSIN, PTA / Southern Tier Physical Therapy Associates

MARTHA GERTY, PT / Broome Developmental Center, Binghamton, New York

MAUREEN HANKIN, RDH, MPH / Dental Hygiene Department, Broome Community College

BETH HOYT, PTA / United Health Services–BGH

DENISE JOHNSON, R.N. / Administrator - Vestal Nursing Center

SUSAN RENDSBURG, PT / Rehabilitation Services, Inc.

VICTORIA RUPAKUS / Director of Rehabilitation Services, Our Lady of Lourdes Memorial Hospital

SALLY SPALIK, PTA / Our Lady of Lourdes Memorial Hospital, Binghamton, New York

MICHELE WILLIAMS / Head PT - Outreach Clinic of Lourdes Mem. Hospital

**For important general information regarding Health Science curricula, see pages 11 and 23.**

**Fifty hours of volunteer work in a facility providing Physical Therapy are required prior to enrollment in PTA Courses. Contact department for information.**

A minimum grade of C in each PTA course is required in order for a student to progress in the PTA curriculum.

# Radiologic Technology

### *Associate in Applied Science*

Radiologic Technology is a diverse profession. The radiographer must draw from the fields of communication, psychology, photography, and the physical and biologic sciences, while bringing an investigative approach to daily tasks. Radiographers are in demand in hospitals, physicians' offices, clinics, government, education, industry, and research.

The radiographer produces images used in the diagnosis of disease and injury. He or she operates x-ray equipment, provides patient care and radiation protection, positions the patient for the examination, selects technical factors for radiographic quality, produces and processes radiographs, maintains quality control, and maintains patient records.

A radiographer may continue education in areas such as sonography, nuclear medicine, cardiovascular interventional techniques, Computed Tomography (CT), Magnetic Resonance Imaging (MRI), mammography, departmental administration, quality assurance management, research, education, and radiation therapy.

BCC's Radiologic Technology program consists of two years of combined academic and clinical education, the equivalent of 21 calendar months. Clinical education is provided in cooperating hospitals. Of a 40-hour/week schedule, students spend approximately one-third of their time in professional and general education courses at the college, and the remaining two-thirds in the college laboratory or in the hospital.

Upon completion of the academic and clinical competencies required for the program, the graduate is eligible to sit for the examination of the American Registry of Radiologic Technologists for certification and New York State licensure.

SEQUENCE OF COURSES: This model is a two-year course schedule for students meeting all program requirements and deciding to pursue full-time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part-time study.

| | | Hours/Week | | Hours/Semester | Credits/Semester |
|---|---|---|---|---|---|
| **FIRST YEAR** | | | | | |
| **Fall Semester** | | Class | Lab | Clinical | |
| BIO 131 | Human Biology I | 3 | 2 | 0 | 4 |
| ENG 110 | College Writing I | 3 | 0 | 0 | 3 |
| RAD 100[1] | Introduction to Clinical Education | 3 | 0 | 160 | 4 |
| RAD 101 | Image Production & Evaluation I | 3 | 1 | 0 | 3 |
| RAD 103 | Positioning I | 1 | 5 | 0 | 2 |
| RAD 110 | Patient Care | 1 | 1 | 0 | 1 |
| RAD 115 | Radiation Protection I | 1 | 0 | 0 | 1 |
| | | **15** | **8** | **160** | **18** |
| **Spring Semester** | | | | | |
| BIO 132 | Human Biology II | 3 | 2 | 0 | 4 |
| CST 105 | Computer Applications | 2 | 2 | 0 | 3 |
| | Social Science elective | 3 | 0 | 0 | 3 |
| RAD 102w | Image Production and Evaluation II | 4 | 1 | 0 | 4 |
| RAD 104 | Positioning II | 1 | 2 | 0 | 2 |
| RAD 132 | Clinical Education II | 0 | 0 | 240 | 2 |
| | | **13** | **7** | **240** | **18** |
| **Summer I** | | | | | |
| RAD 133 | Summer Clinical Education III | 0 | 0 | 440 | 4 |
| RAD 214 | Sectional Anatomy | 1 | 0 | 0 | 1 |
| RAD 216 | Imaging Modalities | 1 | 0 | 0 | 1 |
| | | **2** | **0** | **440** | **6** |
| **SECOND YEAR** | | | | | |
| **Fall Semester** | | | | | |
| RAD 204 | Advanced Positioning | 1 | 2 | 0 | 2 |
| RAD 201 | Radiographic Equipment & Maintenance | 3 | 0 | 0 | 3 |
| RAD 220 | Radiologic Pathology | 2 | 0 | 0 | 2 |
| RAD 230[1] | Clinical Education IV | 0 | 0 | 440 | 4 |
| ENG 220 | Communicating About Ideas & Values | 3 | 0 | 0 | 3 |
| | | **9** | **2** | **440** | **14** |
| **Spring Semester** | | | | | |
| PSY 110 | General Psychology | 3 | 0 | 0 | 3 |
| RAD 225w | Advanced Imaging Procedures | 3 | 0 | 0 | 3 |
| RAD 232 | Clinical Education V | 0 | 0 | 360 | 3 |
| RAD 245 | Radiobiology | 2 | 0 | 0 | 2 |
| RAD 250 | Quality Assurance | 2 | 1 | 0 | 2 |
| RAD 295 | Seminar in Radiography | 2 | 0 | 0 | 2 |
| | | **12** | **1** | **360** | **15** |

**GRADUATION REQUIREMENTS: 71 CREDITS**

**Program supervised by:**

Nancy Button
Office: Decker Center, Room 217
Telephone: 607 778-5070
E-mail: button_n@sunybroome.edu

**Curriculum Advisory Council: Radiologic Technology**

NANCY BUTTON, R.T. (R) / Chairperson, Radiologic Technology Department, Broome Community College
MARK CARLSON, R.T. (R) / Lourdes Primary Care Center
DAVETTE CUMMINGS, R.T. (R) / Wilson Memorial Hospital
FRANK EMICK, R.T. (R) / UHS, Wilson Memorial Hospital
ELAINE FRISBEE, R.T. (R) / United Medical Associates
MARY HOLTHOUSE, R.T. (R) / Supervisor, Our Lady of Lourdes
DIANE JAY, R.T.(R) / Cayuga Medical Center
CRAIG KICK, R.T. (R) / United Medical Associates
DAVID LISI, M.D. / Medical Advisor, UHS, Binghamton General Hospital
CAROL MacGEORGE, R.T. (R) / United Medical Associates
CONNIE MONDAY, R.T. (R) / Chenango Memorial Hospital
WILLIAM RATHMELL, R.T.(R) / A.O. Fox Hospital
DIANE SAWYER, R.T.(R) / Bassett Healthcare–Oneonta Specialty Service
STUDENTS / appointed annually

**For important general information regarding Health Science curricula, see pages 11 and 23.**

[1]Two 40 hour weeks of clinical education during January. Successful achievement is a GRADUATION REQUIREMENT.

**Program supervised by:**

William H. Murray
Office: Applied Technology Building, Room 011
Telephone: 607 778-5017

# Telecommunications Technology

## Associate in Applied Science

The telephone communications system that we use today, and often take for granted, is the largest and most complicated 'network' in the world. Any of millions of telephones can be instantly connected with another through the use of computers and switching circuitry. This vast network is supported by telecommunications technology.

Telecommunications includes the use of computer networks, satellite systems, and television, along with microwave communications. Telecommunications, then, includes any transmission of voice, data, video, facsimile, and computer information — even ATM banking machines.

The study of telecommunications begins with a strong understanding of DC and AC circuitry, modern analog and digital electronics, computer hardware and software, and mathematics, English, and Physics. Graduates of this program will be very familiar with telephone and computer networking, network management, transmission techniques, and computer languages.

All of today's industries require persons with knowledge of telecommunications. This is because all businesses must communicate internally and externally using voice, data, computer, and facsimile.

Telecommunications Technology at BCC is designed to prepare the student for immediate employment. In addition, transfer opportunities allow the graduate to continue study at a four-year institution.

This program may require longer than two years to complete if an entering student has not completed Math I, II, III, and physics in high school. Students lacking any of these courses enter the Pre-Telecommunications Technology program and may be required to take MAT 096 Elementary Algebra and Trig to prepare for MAT 130 Applied Algebra and Trigonometry and PHY 090 Preparatory Physics.

SEQUENCE OF COURSES: This model is a two-year course schedule for students meeting all program requirements and deciding to pursue full-time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part-time study.

| FIRST YEAR | | | Hours/Week | | Credits/Semester |
|---|---|---|---|---|---|
| **Semester I** | | | Class | Lab | |
| CST | 106 | Computer Applications | 2 | 2 | 3 |
| EET | 111 | Electrical Construction Lab I | 1 | 3 | 2 |
| EET | 125 | DC Circuits & Lab | 2 | 2 | 3 |
| ENG | 110 | Written Expression | 3 | 0 | 3 |
| MAT | 130 | Applied Algebra and Trig | 4 | 0 | 4 |
| TEC | 100 | Introduction to Technology | 1 | 0 | .5 |
| | | | **13** | **7** | **15.5** |
| **Semester 2** | | | | | |
| CIV | 113 | Drawing with CAD | 1 | 3 | 2 |
| EET | 112L | Electrical Construction Lab II | 0 | 3 | 1 |
| EET | 126 | AC Circuits & Lab | 2 | 2 | 3 |
| EET | 150L | Electronics Devices Lab | 0 | 3 | 1 |
| EET | 150W | Electronic Devices | 3 | 0 | 3 |
| SS | ____ | Social Science Elective | 3 | 0 | 3 |
| TLC | 110 | Telecommunications I (voice) | 4 | 0 | 4 |
| | | | **13** | **11** | **17** |
| **Semester 3** | | | | | |
| EET | 251 | Electronics Circuitry | 3 | 0 | 3 |
| EET | 251L | Electronics Circuitry Lab | 0 | 3 | 1 |
| EET | 260 | Digital Logic & Lab | 2 | 2 | 3 |
| ENG | 150 | Technical Writing | 3 | 0 | 3 |
| SOS | 111 | Public Policy | 3 | 0 | 3 |
| TLC | 120 | Telecommunications II (data) | 4 | 0 | 4 |
| | | | **15** | **5** | **17** |
| **Semester 4** | | | | | |
| EET | 201 | Senior Seminar | 1 | 0 | 0 |
| EET | 230 | Design and Fabrication | 0 | 3 | 1 |
| EET | 267 | Microprocessors & Lab | 2 | 2 | 3 |
| PHY | 161 | Physics I | 3 | 0 | 3 |
| PHY | 161L | Physics I Lab | 0 | 3 | 1 |
| TLC | 210 | Telecommunications III (LANS) | 4 | 0 | 4 |
| TLC | 220 | Telecommunications IV (topics) | 4 | 0 | 4 |
| | | | **14** | **8** | **16** |

**GRADUATION REQUIREMENTS: 65.5 CREDITS**

[1]Students should consult with the department chairperson or designee to determine the appropriate mathematics course.



# Course Descriptions

# Program Identifying Numbers

State regulations require a listing of all curriculums, together with the degrees they lead to and their HEGIS code numbers. HEGIS stands for Higher Education General Information Survey, and the HEGIS numbers for each curriculum are official federal and state designations. Enrollment in other than registered or otherwise approved programs may jeopardize a student's eligibility for certain aid awards.

| Program Title | HEGIS | Award |
|---|---|---|
| Business Skills | 5001 | Certificate |
| Bus—Accounting | 5002 | AAS |
| Business: Financial Services | 5003 | AAS |
| Bus—Business Administration | 5004 | AS |
| Business Administration - Healthcare Services Administration | 5004 | AS |
| Bus—Marketing Management & Sales | 5004 | AAS |
| Management | 5004 | AS |
| Manufacturing Resources Management | 5004 | AAS, Certificate |
| Purchasing | 5004 | Certificate |
| Office Technologies | 5005 | Certificate |
| Office Administration | 5005 | AAS |
| Communications & Media Arts | 5008 | AS |
| Hotel & Restaurant Management | 5010 | AAS |
| Desktop Publishing | 5012 | Certificate |
| Business Administration - International Business | 5099 | AS |
| Paralegal | 5099 | AAS, Certificate |
| Computer Science | 5101 | AS |
| Computer Information Systems | 5101 | AAS |
| Computer Technology | 5101 | AAS |
| Website Development & Management | 5103 | Certificate |
| Dental Assisting | 5202 | Certificate |
| Dental Hygiene | 5203 | AAS |
| Medical Laboratory Technology | 5205 | AAS |
| Phlebotomy | 5205 | Certificate |
| Radiologic Technology | 5207 | AAS |
| Nursing | 5208.10 | AAS |
| Health Information Technology/Medical Records | 5213 | AAS |
| Medical Transcription | 5213 | Certificate |
| Medical Assistant | 5214 | AAS |
| Physical Therapist Assistant | 5219 | AAS |
| EMT (Paramedic) | 5299 | AAS |
| Chemical Engineering Technology | 5305 | AAS |
| Civil Engineering Technology | 5309 | AAS |
| Electrical Engineering Technology | 5310 | AAS |
| Electrical Technology[1] | 5310 | AAS |
| Telecommunications Technology | 5310 | AAS |
| Electrical/Mechanical Technology | 5311 | AAS |
| Industrial Technology | 5312 | AAS, Certificate |
| Industrial Technology - Quality Assurance | 5312 | AAS, Certificate |
| Mechanical Engineering Technology | 5315 | AAS |
| Dietary Manager | 5404 | Certificate |
| Human Services | 5501 | AS, Certificate |
| Early Childhood | 5503 | AAS, Certificate |
| Business Information Management | 5504 | AAS |
| Records/Information Management | 5504 | Certificate |
| Criminal Justice - Corrections | 5505 | AS |
| Criminal Justice - Police | 5505 | AAS |
| Chemical Dependency Counseling | 5506 | AAS |
| Fire Protection Technology | 5507 | AAS, Certificate |
| Engineering Science | 5609 | AS,Certificate |
| Liberal Arts | 5649 | Certificate |
| Liberal Arts & Sciences | 5649 | AS, AA |
| Liberal Arts & Sciences - General Studies | 5649 | AS |
| Individual Studies | 5699 | AAS, AS |

[1]Pending approval

# Course Descriptions

### The offering of any course is subject to sufficient enrollment.

- Courses numbered from 100-199 are generally first level courses; those numbered 200-299 are usually second level.
- The number of credits is listed in parenthesis after the course title.
- The number of lecture and/or laboratory hours per week and any prerequisites are listed after the course descriptions.
- Courses are listed in alphabetical order by call letters.

Alcohol and Substance Abuse Counseling: ASA
Anthropology: ANT
Art: ART
Banking: BNK
Biology: BIO
Business: BUS
Business Information Management: BIM
Business Information Technology: BIT
Certified Dental Assisting: CDA
Chemistry: CHM
Civil Engineering Technology: CIV
College: COL
College Success Seminar: CSS
Communications: COM
Community Internship: CTP
Computer Graphics: CAD
Computer Studies: CST
Criminal Justice: CRJ
Dental Hygiene: DEN
Dietary Manager: DIA
Direct Marketing: DMR
Early Childhood: ECE
Economics: ECO
Electrical Engineering Technology: EET
Emergency Medical Technician: EMT
Engineering Science: EGR
English: ENG
English as a Second Language: ESL
Fire Protection: FRS
French: FRE
Geography: GEO
German: GER
Health Care Management: HCM
Health Information: HIT
Health Sciences: HST
History: HIS
Honors: HON
Hotel/Restaurant Management: BHM
Human Development: SAC
Humanities: HUM
Human Services: HMS
Interior Design: INT
Italian: ITA
Law/Paralegal: LAW
Learning Skills: LRS
Literature: LIT
Manufacturing Resources Management: MRP
Mathematics: MAT
Mechanical Engineering Technology: MET
Medical Assistant: MDA
Medical Laboratory: MLT
Music: MUS
Nursing: ADN
Paramedic: PMD
Philosophy: PHI
Physical Education: PED
Physical Science: PHS
Physical Therapist: PTA
Physics: PHY
Political Science: POS
Psychology: PSY
Quality Assurance: SQC
Radiologic: RAD
Reading Skills: RDG
Russian: RUS
Sign Language: ASL
Social Science: SOS
Sociology: SOC
Spanish: SPA
Speech: SPK
Student Affairs Course: SAC
Study Abroad: SAP/OP
Telecommunications: TLC
Theater: THR

- All courses marked (*) are taught evenings only and when enrollment permits
- All courses marked (†) carry separate grades for lecture and laboratory
- All courses marked (‡) are combined lecture-laboratory courses, and final grade depends on successful completion of both parts.

## NURSING

### ADN 105
**Meeting Human Needs I** **(7)**

The focus of this course is identifying and integrating the hierarchy of human needs into the nursing care of persons across the life cycle.

The philosophy of the program is introduced which includes our beliefs about human caring, the nature of human beings, health and nursing. Gordon's Eleven Functions of Man which provided the organizing structure of the nursing program is also introduced.

Emphasis is placed on health assessment, health promotion, and health maintenance related to self and others.

The nursing process is introduced as the modality through which critical thinking skills are applied in the delivery of care. Pharmacological concepts are introduced as they relate to healthy individuals across the life cycle.

The student provides care in a variety of settings with close supervision. The roles of the nurse are introduced.

**4 Class Hours, 6 Clinical Hours, 2 Lab Hours; Pre- or Corequisites: BIO 131, Human Biology I, ENG 110 College Writing I, and PSY 110 General Psychology.**

### ADN 106
**Meeting Human Needs II** **(7)**

The focus of this course is on the nursing care of persons who have actual/potential health problems related to the health patterns of Health Perception/Health Management, and Nutrition/Metabolic. Classroom theory and clinical practice integrate all 11 of Gordon's Functional Health Patterns.

Integrated in the course are our beliefs about human caring, the nature of human beings, health and nursing. The concepts of hierarchy of human needs and life cycle are applied to the nursing care of persons with common health problems.

The nursing process is utilized as the modality through which critical thinking skills are applied in the delivery of care.

Emphasis is placed on health assessment, health promotion, health restoration, and health maintenance.

The student provides nursing care with supervision in a variety of settings.The nursing roles are further developed.

**4 Class Hours, 6 Clinical Hours; 2 Laboratory Hours; Prerequisite: ADN 105 Meeting Human Needs I. BIO 131 Human Biology I. Pre- or Corequisite: BIO 132 Human Biology II.**

### ADN 112
**Holistic Health** **(2)**

This course is open to all majors and requires no prerequisite. Holistic health of ourselves is explored via investigation of the concepts of body, mind, spirit and emotions. Techniques for relaxation and/or guided imagery are offered daily. Lectures and discussions on stress management, meditation, exercise, nutrition and alternative perspectives regarding health management.

**2 Class Hours**

### ADN 116
**Humor and Healthy Living** **(1)**

Research has proven that humor has important benefits for one's health which include providing stress relief and enhanced coping skills, strengthening the immune system and facilitating communication. This class will provide an overview of the benefits of humor, enlighten the participant about current research, and enable him or her to develop ways to incorporate humor in everyday life. Class format will include lecture, sharing of research done by class participants, and presentations by students regarding pertinent aspects of humor.

**1 Class Hour**

### ADN 211
**Meeting Human Needs III** **(7)**

The focus of this course is on the nursing care of persons who have actual/potential health problems related to health patterns of: Nutritional/Metabolic, Elimination, and Sexuality/Reproductive. Classroom theory and clinical practice integrate all 11 of Gordon's Functional Health Patterns.

Integrated in this course are our beliefs about human caring, the nature of human beings, health and nursing. The concepts of hierarchy of human needs and life cycle are applied to the nursing of persons with common health problems.

The nursing process is utilized as the modality through which critical thinking skills are applied in the delivery of care.

Emphasis is placed on health assessment, health promotion, health restoration and health maintenance. The student provides nursing care to persons in both specialty and general medical/surgical units, as well as in community settings. With increasing autonomy, students assume the roles of the nurse.

**4.5 Class Hours, 6 Clinical Hours; 1.5 Laboratory Hours; Prerequisites: ADN 106 Meeting Human Needs II, BIO 132 Human Biology II, and PSY 210 Developmental Psychology.**

### ADN 212
**Meeting Human Needs IV** **(7)**

The focus of this course is on the nursing care of persons who have actual/potential health problems related to health patterns of: Activity/Exercise, Self-Perception, and Sleep/Rest. Classroom theory and clinical practice integrate all 11 of Gordon's Functional Health Patterns.

Integrated in this course are our beliefs about human caring, the nature of human beings, health and nursing. The concepts of hierarchy of human need and life cycle are applied to the nursing care of persons with common health problems.

The nursing process is utilized as the modality through which critical thinking skills are applied in the delivery of care.

Emphasis is placed on health assessment, health promotion, health restoration and health maintenance. The student provides nursing care to persons in both specialty and general medical/surgical units, as well as in commmunity settings. With increasing autonomy, students assume the roles of the nurse.

**4.5 Class Hours, 6 Clinical Hours; 1.5 Laboratory Hours; Prerequisites: ADN 106 Meeting Human Needs II, BIO 132 Human Biology II, and PSY 210 Developmental Psychology.**

### ADN 213
**Meeting Human Needs V** **(7)**

The focus of this course is on the nursing care of persons who have actual/potential health problems related to the health patterns of: Activity/Exercise, Role/Relationship and Values and Beliefs. Classroom theory and clinical practice integrate all 11 of Gordon's Functional Health Patterns.

Integrated in this course are our beliefs about human caring, the nature of human beings, health and nursing. The concepts of hierarchy of human needs and life cycle are applied to the nurse care of persons with common health problems.

The nursing process is utilized as the modality through which critical thinking skills are applied in the delivery of care.

Emphasis is placed on health assessment, health promotion, health restoration and health maintenance. The student provides nursing care to persons in specialty and general medical/surgical units, as well as in commmunity settings. With increased autonomy, the students assume the roles of the nurse.

**4.5 Class Hours, 6 Clinical Hours; 1.5 Laboratory Hours; Prerequisites: ADN 106 Meeting Human Needs II, BIO 132 Human Biology II, and PSY 210 Developmental Psychology.**

### ADN 214
**Meeting Human Needs VI** **(7)**

The focus of this course is on the nursing care of person who have actual/potential health problems related to the health patterns of: Cognitive/Perceptual and Coping/Stress. Classroom theory and clinical practice integrate all 11 of Gordon's Functional Health Patterns.

Integrated in this course are our beliefs about human caring, the nature of human beings, health and nursing. The concepts of hierarchy of human needs and life cycle are applied to the nursing care of persons with common health problems.

The nursings process is utilized as the modality through which critical thinking skills are applied in the delivery of care.

Emphasis is placed on health assessment, health promotion, health restoration and health maintenance. The student provides nursing care to persons in specialty and general medical/surgical units, as well as in community settings. With increased autonomy, the students assume the roles of the nurse.

**4.5 Class Hours, 6 Clinical Hours; 1.5 Laboratory Hours; Prerequisites: ADN 106 Meeting Human Needs II, BIO 132 Human Biology II, and PSY 210 Developmental Psychology.**

### ADN 298
**Nursing Seminar** **(1)**

The purpose of this course is to facilitate transition of returning, transfer and advanced placement students into the nursing program. The course focuses on the nursing department philosophy, the conceptual framework, the nursing process and use of the course syllabi. Students are required to practice and demonstrate selected nursing skills.

**1 Class Hour, 1 Clinical Hour**

**Prerequisites: Students in this course must have met requirements for transfer or have passed the required challenge examination for advance placement.**

### ADN 299
**Independent Study** **(1-3)**

An individual student project in the nursing field which is beyond the scope of requirements of the courses offered by the department conducted under the direction of a nursing faculty member and approved by the department chairperson. Independent study is available to students who have completed one semester of Professional Nursing Courses.

## ANTHROPOLOGY

### ANT 111
**Cultural Anthropology** **(3)**

Introduction to the study of culture as the behavioral adaptation unique to human societies. Cultural characteristics shared by all humans and major variations found among specific groups. Explanations for rules of social interaction in common activities, the social functions of institutions, language is a culturally defined system of communication, modernization in our own and third world societies.

**3 Class Hours**

### ANT 112
**Introduction to Archaeology** **(3)**

An introduction to current archaeological issues, method and theory. The nature of archaeological data and the means by which they are gathered, analyzed, dated and interpreted will be considered by reviewing key prehistoric and historic sites and materials.

**3 Class Hours**

### ANT 113
**Introduction to Biological Anthropology** **(3)**

An introduction to the biology and evolutionary history of humans. The course will consider basic concepts of evolutionary theory and human genetics, the fossil record for human evolution, the behavior and ecology of living non-human Primates, and human population biological adaptation and diversity.

**3 Class Hours**

### ANT 114
**Language, Culture, and Communication** **(3)**

An introduction to the multifaceted meanings and uses of language in society. Basic discussion of issues in the evolution of language, language learning, language and cultural meaning and sociolinguistics. Relationships between language and class, race and gender.

**3 Class Hours**

### ANT 299
**Independent Study** **(1-3)**

An individual student project in anthropology which is beyond the scope of requirements of the course offered by the department, conducted under the direction of a faculty member and approved by the department chairperson.

**Prerequisite: 3 Semester Hours in Anthropology.**

## ART

### ART 102
**History of Western Art I** **(3)**

An overview of Western Art from 25,000 BC to about 1550 AD. Study of man's made objects, paintings, sculpture, drawings, graphics, ceramics and some architecture to reveal the relationships between these objects and the history of civilizations. Slide lecture format.

**3 Class Hours**

### ART 103
**History of Western Art II** **(3)**

Survey of the visual arts in Western culture from the late Renaissance until the 1990s to reveal how art mirrors life and reflects its ideals. Special emphasis on

American painting and sculpture. Slide lecture format and field trips.

**3 Class Hours**

### ART 104
**History of Asian Art** **(3)**

History of Asian Art is appropriate for all students who are interested in the cultural traditions and artistic expressions of Asian countries. This course presents a general survey of the development of Asian Art and Architectural forms in the Far East including India, Japan and China with supplementary study of Korea, Tibet, Indonesia, Burma and Thailand. Cultural traditions, especially Buddhism introduced. Prior experience in art history is not necessary. The format involves slide lecture, readings and class discussion.

### ART 105
**Introduction to Two-Dimensional Design (3)**

Introduction to design involves the student with investigation of visual perception and organization. Training the eye to become sensitive to design elements and principles is emphasized. Critical analysis of point, line, shape, value, texture, and color; and balance, proportion, scale, rhythm, and unity. The student will become familiar with a variety of media and intellectual comprehension of text, lecture, and visual examples. Class projects focus on logic and expression to create spatial illusion in composition.

**2 Class Hours, 2 Studio Hours.**

### ART 106
**Introduction to Three-Dimensional Design** **(3)**

Developing sensitivity and awareness of our spatial environment is the object of this course. Aesthetic and functional elements of three-dimensional design are explored. Through reading, projects, lectures and field trips, techniques are explored to assist in heightening awareness. This enables the student to understand the functional and aesthetic examples of the three-dimensional environment. Emphasis is placed on studio projects.

**2 Class Hours, 2 Studio Hours.**

### ART 107
**Color Theory** **(2)**

An introduction to the complex language of color, including the investigation of additive and subtractive systems in traditional and electronic applications. Students gain practical knowledge and visual sensitivity giving them self-confidence in applying color to graphic presentations and three-dimensional forms. Emotional, symbolic, and cultural significance of color is explored through visual examples in historical and contemporary contexts. Knowledge applicable to painting, printmaking, illustration, website design, fashion design, interior design, landscape design, architecture, sculpture, and product design. Coursework includes experimentation with various materials, lectures, discussions, and presentations.

**1 Class Hour, 2 Studio Hours.**

### ART 108
**History of Architecture I** **(3)**

Overview of 40 centuries of building, beginning in Ancient Egypt. The student follows the political, technological, religious and social movements that have influenced the major design styles, outstanding architects, and designer of each era through the Gothic period.

**3 Class Hours**

### ART 109
**History of Architecture II** **(3)**

Overview of the history of buildings from the Early Renaissance to the present. Students achieve an historical perspective on and understanding of the development and evolution of architectural design.

**3 Class Hours**

### ART 110
**Modern Art** **(3)**

Art of the late 19th century. Impressionism (circa 1870) to Cubism and other forms of abstract art. Panorama of 20th century visual movements including Futurism, Surrealism, Abstract Expressionism, Pop Art, and Post-Modernism. Slide/lecture format and field trips.

**3 Class Hours**

### ART 111
**History of Decorative Arts: 1600 - present** **(3)**

Introduction to the development of style in fabric, furniture and accessories for the interior from 1600 to the present. Emphasis will be placed on the history of American interiors.

Required for interior design students, recommended for students in Art and Design and as an elective for students interested in history or American Studies.

### ART 112
**Beginning Photography** **(3)**

Basics of camera design and operation, plus the fundamentals of photographic visualization and composition: line, form, color, light shadow. Darkroom procedures, film processing, basic printmaking, selecting printing techniques. (Students must have their own 35mm single lens reflex camera and should expect to pay for their own photographic materials — about $100+-.)

**2 Class Hours, 2 Laboratory Hours.**

### ART 114
**The History of Art and the Human Figure (3)**

A chronological survey of the representation of the human body in the production of art from antiquity to the present. Emphasis is on the belief systems of specific cultures, and how those beliefs influence self-perception, and self-expression. Students will study basic human anatomy looking closely at the rise of anatomical science and its influence upon Renaissance and Baroque art. The current use and misuse of the human body in media is also explored. Format involves slide lecture, readings, and class discussion.

**3 Class Hours**

### ART 115
**Beginning Drawing** **(3)**

Emphasis on a series of open-ended interrelated problems dealing with visual language and its vocabulary, and organization. Drawing problems will intensify the student's perception and comprehension of the elements and principles of design including point, line, shape, tone, texture, and color; and balance, proportion, scale, rhythm, and unity in composition. Student's perception and comprehension of light, space, and form will be given special emphasis.

Format involves intensive instruction and demonstrations in charcoal, pencil, pen and ink, and mixed media as a means to personal investigation, understanding, and expression. Subjects include landscape, figure, and still-life. Various historical models will be studied through text and visual examples. Students are encouraged to develop their own style and viewpoint through discussion of art criticism.

**6 Studio Hours**

### ART 116
**Painting I** **(3)**

Lectures and practical application will focus on design fundamentals to depict form in space. Subjects include value studies of form light, front light, rim light, and back light. Paint-handling, composition, figure-based vignettes, still-life, landscape, and abstraction will be explored.

In the Summer session, the landscape will be the subject of lectures and practical applications. Lectures will include value studies of the sunny day, gray day, and moonlit sky with and without recession.

**6 Studio Hours; Prerequisite: ART 115 Drawing or portfolio review.**

### ART 120
**Beginning Sculpture** **(3)**

This course is designed for students to realize the creative process that takes place in the art making of sculpture. Students will be introduced to various fundamental techniques and treatment of sculptural materials. This course will enhance the beginning student's skills in building the armature, clay sculpting of bas-reliefs, round sculpting, and plaster casting. Students will explore sculptural forms and will become familiar with fundamental aesthetics and the methods of expanding the visual sense. Throughout the course, emphasis will be placed on experimentation, reading, and discussion. This course will ultimately assist the student to further develop an artistic direction in three dimensional studies. Includes sculpting from life.

**3 Class Hours, 3 Studio Hours; Prerequisite: Three Dimensional Design for Art majors. An elective for non-art majors.**

### ART 125
**Introduction to Computer Graphics** **(3)**

Digital image software used in both Fine Art and Commercial Art arenas is investigated and used in practical application including QuarkXPress, Adobe Photoshop 5.5, and Adobe Illustrator 9.0. Imagery specialties are explored in many product categories such as Editorial, Music, and Corporate design. In addition, Information and Environmental design, Advertising, New Media, and Motion Design are addressed.

Students learn to develop conceptual ideas and develop their designs into a finished product. The art of typography, layout, and image alteration is explored.

Commercial art class projects may include how to create various press-press products such as multi-fold brochures, print media advertisements, packaging, magazine covers, CD covers, signature booklets, and product decals.

Students are encouraged to develop a design aesthetic and learn the process involved in obtaining freelance design work or employment at large design firms through the creation of a portfolio and the Internet.

**2 Class Hours, 2 Studio Hours; Recommended: ART 105 or ART 115, and BIT 108 or equivalent.**

### ART 130
**Introduction to Ceramics: Construction and Glazes** **(3)**

Study of the basic processes of design and creation of clay forms, both functional and sculptural. Techniques of handbuilding, throwing on the potter's wheel, glazing and firing will be explored.

**Recommended: ART 106.**

### ART 140
**Printmaking** **(3)**

This three-part course will begin with an introduction to printmaking through the methods of collograph and monotype printing. Then linecuts and woodcuts will be developed, and there will be a concentration on the silkscreen process. The third part will be an historical survey of printmaking and its techniques. This will be accomplished through visits to local print collections.

**6 Studio Hours; Prerequisite: ART 115 or ART 105 or portfolio review.**

### ART 146
**History of Photography** **(3)**

This course is designed to give students a strong background in the historic, aesthetic, and cultural background of photography as both a significant art form and important cultural and communications medium.

The course content includes topics dealing with the invention of photography, photography as art in the 19th century, great photographers, and new photography.

**3 Class Hours**

### ART 150
**Perspective Drawing** **(3)**

Graphic techniques developed for visual presentation of architectural, industrial and aesthetic forms. Studio projects stress creation of the representational image using perspective, color, texture and light. Applicable to advertising and illustration of ideas and products.

**2 Lecture Hours, 2 Lab Hours; Prerequisite: CIV 159 Basic Drafting or ART 115, Drawing.**

### ART 202
**Commercial Photography** **(3)**

Students will gain practical experience as to the theory behind and application of commercial photography and illustration. Projects will be relative to today's marketing and societal needs. Lighting and composition will be heavily stressed. Photographic format will be slide film. Prerequisite: Art 112 or Art 212 or by portfolio acceptance by instructor. Lab cost to student approx. $100 for supplies and processing.

**2 Class Hours, 2 Lab Hours.**

### ART 212
**Intermediate Photography** **(3)**

Systems of precise exposure and processing control. Advanced black and white darkroom techniques. Introduction to color theory, processes and printing. Functional portfolio development. Introduction to digital electronic imaging. (Students must have their own 35mm single lens reflex camera and should expect to pay for their own photographic materials — about $100+-.)

**2 Class Hours, 2 Laboratory Hours; Prerequisite: ART 112 or by portfolio acceptance and permission of instructor.**

### ART 213
**Model Building** **(2)**

Scale models built for specific design problems. Projects to include interiors, buildings, site plans, furniture, stage sets. Recommended for students interested in architecture, landscape design, and set design for theater. Required for interior students.

**Prerequisite: ART 106 3-Dimensional Design and/or CIV 159.**

### ART 214
**Internship** **(1-4)**

Available to second-year Art and Design students with a faculty member's recommendation. Internship requirements will be developed on an individual basis with an art faculty member's supervision.

### ART 215
**Painting II** **(3)**

An opportunity to refine the principles explored in Painting I with an emphasis on execution.

Preliminary studies in composition will be required before focusing on large-scale finished paintings. Concepts of edges, lighting, planes, forms, value relationships, and brushwork re-examined.

**6 Studio Hours; Prerequisite: ART 116 Painting I or portfolio review.**

### ART 217
**Advanced Drawing** **(3)**

Advanced course presenting new media techniques and concepts; life drawing emphasized.

**6 Studio Hours; Prerequisite: ART 115 Drawing or portfolio review.**

### ART 225
**Illustration** **(3)**

This course is directed towards the student pursuing an emphasis in graphic arts. It considers the drawn or painted image as a means of communication utilizing narrative imagery and pictorial illusion and space. Students will solve illustrative problems relating to magazine articles, posters, packaging, book covers, children's picture books, and other materials.

**6 Studio Hours; Prerequisites: ART 105 Introduction to Two-Dimensional Design, ART 115 Beginning Drawing, and an art history elective.**

### ART 226
**Advanced Computer Imagery** **(3)**

A continuation of the graphic design concepts in ART 125. Through ever increasingly demanding visual problems the student will become more aware of the critical and creative problem-solving skills necessary in the graphic arts profession using QuarkXPress, Adobe Photoshop 5.5, and Adobe Illustrator 9.0. Imagery specialties are explored in many product categories such as Editorial, Music, and Corporate design. In addition, Information and Environmental design, Advertising, New Media, and Motion Design are addressed.

Students learn to develop an individual visual sense by conceptualizing and developing their own designs into unique finished products. The art of typography, layout, and image alteration is explored.

Commercial art class projects may include how to create various press-press products such as multi-fold brochures, print media advertisements, packaging, magazine covers, CD covers, signature booklets, and product decals.

Students are encouraged to develop a design aesthetic and learn the process involved in obtaining freelance design work or employment at large design firms through the creation of a portfolio and the Internet.

**2 Class Hours, 2 Studio Hours; Required course for students choosing the Graphic Arts emphasis, Elective for other students. Prerequisites: ART 125: Introduction to Computer Graphics, and ART 225: Illustration.**

### ART 227
**Editorial Design** **(3)**

Students investigate the segment of the graphic arts industry that is responsible for the creation of newspapers, tabloids, and periodicals such as magazines and monthly trade journals. The art of page layout is explored as a powerful tool that editorial designers can use to influence how we interpret world and local events.

This course will emphasize the idea that "people learn best by doing". Students will publish a periodical. The classroom setting will be transformed into a small-scale publishing business where students experience a variety of publishing roles such as: *Art Direction, Advertising Design, Page Layout, Marketing, Advertising and Sales*, and *Editing*.

Students will experience and understand the critical connection between Graphic Arts and Business. The publication will contain advertisements created for local businesses and text gathered from faculty members, students, and our community. Students will have the opportunity to develop professional relationships with local business clients.

**2 Class Hours, 3 Studio Hours; Required course for students choosing the Graphic Arts emphasis, Elective for other students. Prerequisites: ART 125: Introduction to Computer Graphics, and ART 226: Advanced Computer Imagery.**

**Independent Study: Art** **(1-3)**
**ART 298 Studio Art**
**ART 299 Art History**

An individual student project concerned with advanced work in a specific area of art. Conducted under the direction of a faculty member, independent study is concerned with material beyond the scope and depth of the ordinary course.

**Prerequisite: 3 semester hours of college level work in Art.**

## ALCOHOL AND SUBSTANCE ABUSE COUNSELING

### ASA 110
**Introduction to Chemical Dependency Studies** **(3)**

This course provides an introduction to the physical, psychological, social, familial and legal aspects of chemical abuse. The chemistry, psychopharmacology, theories and stages of addiction will be introduced and explored. Relevant history, problems of special populations of addicted clients and contributions of 12 Step Programs will be reviewed. Treatment approaches will be included but are dealt with more extensively in other courses in the ASA curriculum.

**Prerequisite: none.**

### ASA 210
**Chemical Dependency Counseling I (3)**

This course identifies the uniqueness of chemical dependency counseling by examining concepts, issues and skills required to provide basic group therapy for chemically dependent persons. Group norms, goals, content, process, stages of group growth, group curative factor's, group principles and issues/problems of group dynamics are explored.

**Prerequisite: ASA-110, PSY-217 as either prerequisite or corequisite.**

### ASA 220
**Chemical Dependency Counseling II (3)**

This course builds on concepts from ASA 210. Eight approaches to individual (and group) counseling: Person-centered, Behavioral, Reality, Gestalt, Rational-Emotive, Transactional Analysis, Cognitive, and Spiritual approaches will be explored in the context of a model of addiction recovery. Ethical standards and practices are reviewed relative to chemical dependency counseling. Relationship between eight approaches and 12-step programs, early intervention strategies, cross addiction, dual diagnosis, relapse prevention are introduced.

**Prerequisite: ASA 110, ASA 210, PSY 217 as prerequisite or corequisite.**

### ASA-230
**Family Issues in Chemical Dependency (3)**

This course is designed to analyze the effects of chemical abuse on the family. Emphasis will be placed on family roles, dynamics, characteristics of children of chemical abusers, theories of co-dependence, adult children of such families and adaptations made individually and socially by family members. Critical issues and strategies in family treatment will be explored.

**Prerequisite: ASA-110.**

### ASA-240
**Special Topics in Chemical Dependency (3)**

This course is designed to provide an overview of topics of special interest and relevance to the field of addiction. Topics may change from semester to semester; researching and learning about new/special topics is encouraged. The course will also regularly examine the special problems and issues of selected client groups in treatment and recovery, e.g. children/adolescents, women, the elderly, gay and lesbian, dually diagnosed, relapse and cross cultural issues.

**Prerequisites: ASA-110, 210 and 220 or permission of Instructor.**

### ASA 310, 320
**Supervised Clinical Internships (4)**

Two semesters of practicum, under supervision, in a chemical dependency treatment facility is required to expose the student to the work of such facilities and to sensitize the student to the prevention, clinical, and documentation work and skills of the profession. The student enters the field work as an intern and is subject to all legal, ethical, and professional standards required of staff members. Placement may be in rehabilitation programs, detox units, prisons, hospitals, public school prevention programs/education programs, crisis centers, clinics or other recognized facilities designated for the education, prevention, or treatment of chemically dependent persons. A primary goal of the internship(s) is to evaluate the student under actual working conditions to ascertain readiness for clinical work in the field.

**Prerequisite for ASA 310: ASA 110, 210**

**Prerequisite for ASA 320: ASA 110, 210, 220, 310**

### ASA 250
**Ethical Principles/Practices in Chemical Dependency Treatment (1)**

This 5 week module will cover the content required for the Certified Alcohol and Substance Abuse Counselor (CASAC) credentialing process. The focus will be on the chemically dependent population and the ethical considerations related to the treatment environment. The student will gain knowledge of the Canon of Ethical Principles. In addition to the Canon, topics wil include: counselors in recovery, counselor relapse, countertransference, confidentiality and the law, sexual harassment, client-counselor relationships, and ethics in the workplace.

**Prerequisite: ASA 110, 210 or permission of instructor.**

### ASA 255
**Chemical Dependency and the HIV/AIDS Population (1)**

This 5 week module will expose students to the application of principles of chemical dependency theory and practice to the HIV/AIDS population. The unique needs of this client group require special consideration in adapting treatment. Focus will also include tuberculosis and federal law pertaining to HIV/AIDS information and confidentiality issues.

**Prerequisite: ASA 110, 210 or permission of instructor.**

### ASA 260
**Pharmacology and Chemical Dependency (1)**

This 5 week module will address basic pharmacology, e.g., bioavailability, dosage, synergism, classification of substances, and schedules. In particular, medications (particularly prescription medications) which are commonly abused and have potential for dependence, will be addressed.

**Prerequisite: ASA 110, 210 or permission of instructor.**

## SIGN LANGUAGE

### ASL 120
**American Sign Language I (3)**

Introduction to conversationally relevant signs, fingerspelling, grammatical sign principles, and background, cultural, and linguistic information related to deaf people and sign language. The Direct Experience Method is used to help students learn to sign by experiencing the use of signs directly. Some emphasis is on non-manual communication (visual training, gestures and mime are used to help develop a comfort level for using face, hands and body for communication purposes). Approximately 400 signs are introduced.

**3 Class Hours**

### ASL 220
**American Sign Language II (3)**

Review of ASL. Expressive and receptive fingerspelling as well as recall of vocabulary. Sign vocabulary is further organized around basic conversational topics and questions. Sign grammatical principles are expanded and practiced. Approximately 300 signs are introduced.

**3 Class Hours; Prerequisite: ASL 120 American Sign Language I.**

### ASL 230
**American Sign Language III (3)**

Additional and expanded topics for conversation are introduced with the associated vocabulary. Variations of signed messages by incorporating different sign principles and mime. More emphasis on conversational fluency in sign. The student will be able to generate increasingly more complex signing structures. Approximately 300 additional signs are introduced.

**3 Class Hours; Prerequisite: ASL 220 American Sign Language II.**

## HOTEL/RESTAURANT MANAGEMENT

### BHM 110
**Sanitation and Safety (3)**

A course in the fundamentals of restaurant and hotel organization and sanitation. In this certification course the student will learn the control points in food service, the importance of sanitation, and safety procedures.

**3 Class Hours**

### BHM 125W
**Hospitality Law (3)**

A study of the legal principles governing hospitality operations including: common law, contracts, laws of tort and negligence, hotel-guest relationship, laws regarding food, food service and alcoholic beverages and employment laws.

**3 Class Hours; Prerequisite: BUS 118.**

### BHM 201
**Hotel/Restaurant Internship I (3)**

Career-related employment in the hospitality industry focusing on an area of interest in a hotel or restaurant. The intern will experience the opportunity to apply the theory learned in the program within a hospitality business setting. First year course work must be completed.

**3 Class Hours; Prerequisite: 30 credit hours sucessfully completed toward Hotel/Restaurant Management degree.**

### BHM 216
**Quantity Food Production (3)**

This course focuses on the theory and practice of cooking methods such as frying, roasting, broiling, griddle work, poaching and sauteing, with a basic understanding of use and care of kitchen equipment. Some items to be prepared by the student include: stocks, sauces, soups, vegetables, appetizers, sandwiches, salads, dairy products, meat, poultry, seafood, international dishes and basic bakery products.

**1 Class Hour, 6 Lab Hours; Prerequisite: BHM 110.**

### BHM 230
**Front Office Operations Management (4)**

A study of the importance of guest service, communications with one front office and other departments, reservation systems, registration techniques, and safety and security. Accounting and night audit, reports and yield management will also be covered. A computerized front office simulation will be used in this class.

**4 Class Hours; Prerequisite: BUS 108 - Accounting Services Business, BUS 112 - QBM, Designated Computer Elective**

### BHM 235
**Hotel and Restaurant Cost Control (4)**

This course presents practical techniques for protecting hospitality establishments profits. Covering a broad area of controls over food, beverage and labor areas, this course builds a sound foundation of concepts and applications of management cost control procedures. Computer spread sheet applications software will be used in class.

**4 Class Hours; Prerequisites: BUS 100, BUS 112.**

### BHM 270
**Hospitality Managerial Accounting (3)**

This course provides students with a basis for planning and protecting a hospitality operation's financial success. Covers methods of financial analysis, forecasting, and budget and cost management.

**3 Class Hours; Prerequisite: BHM 235.**

### BHM 297
**Hotel/Restaurant Internship II (3)**

Career-related employment in the hospitality industry focusing on an area of interest in a hotel or restaurant. The intern will experience the opportunity to apply the theory learned in the program within a hospitality business setting. Senior status.

**3 Class Hours; Prerequisite: BHM 201.**

## BUSINESS INFORMATION MANAGEMENT

### BIM 100
**Introduction to Business Information Management (3)**

Concepts of database management as applied to database software and the world wide web.

**3 Class Hours**

### BIM 101
**File Classifications System (1)**

Application of ARMA simplified alphabetic filing rules. Comparison of alphabetic, subject, numeric and geographic classification systems.

**1 Class Hour**

### BIM 102
**Introduction to Database Management (1)**

The student will study file classification systems, files management, and concepts of database management.

### BIM 103
**Advanced Database Management (1)**

Organization of report data, linking tables and preparation of multi-table reports applicable to business-related documents.

**1 Class Hour; Prerequisite: BIM 102 Introduction to Database Management.**

### BIM 110
**Systems and Procedures in Business Records Management (3)**

Establishing and maintaining an effective records management program. Emphasis on policies, practices, and technologies.

**3 Class Hours**

### BIM 111
**The Records Management Professional (1)**

Establishment, organization and staffing of records management systems.

**1 Class Hour**

### BIM 112
**Records Analysis (1)**

Procedures for inventory, analysis, retention, disposition, and protection of records.

**1 Class Hour**

### BIM 113
**Archival Functions (1)**

Identification and prerservation of vital records.

**1 Class Hour**

### BIM 150
**Understanding Electronic Commerce (3)**

An introduction to electronic commerce designed to create an understanding of the ways information technology and the Internet have transformed fundamental business precepts. Technical infrastructure, virtual communities, and security, legal, and regulatory issues will be addressed. Business-to-business and business-to-consumer strategies will be explored.

**3 Class Hours**

### BIM 200
**Business Records Management Technologies (3)**

This course introduces students to the following functions of Records/Information Management: Forms Management, Disaster Prevention and Recovery, Micrographics, Optical Disk Technology and Reprographics.

**3 Class Hours**

### BIM 201
**Disaster Prevention & Recovery (1)**

Preparation and development of strategies for resumption of business operations following calamity.

**1 Class Hour**

### BIM 202
**Technology of Information Management (1)**

Application of micrographics, reprographics, and forms management to records management systems.

**1 Class Hour**

### BIM 203
**Electronic Document and Imaging Systems (1)**

Application of electronic storage and retrieval systems functions to the field of records management.

**1 Class Hour**

### BIM 290
**Special Topics in BIM (1-3)**

Topics in this course will acquaint students with current advances and techniques in records and information management technologies. Course topics may include: Geographic Information Systems, Imaging Data Base Systems, Smart Courtrooms.

**1-3 Class Hours; Prerequisite: Department Approval.**

### BIM 297
**Internship (1-3)**

Students receive career-related on-the-job experience in records and information management. Cooperative work experience students will meet with the internship coordinator as scheduled.

**Prerequisite: BIM 100, BIM 110, BIM 200.**

### BIM 299
**Independent Study (1-4)**

Under the guidance of a faculty member, the student will undertake a study, project, or research involving an advanced concept or problem relating to his/her major field of study. Only one independent study course is allowed per semester.

**1-4 Class Hours; Prerequisite: Approval of faculty member and Department Chairperson.**

## BIOLOGY

### BIO 090
**Preparatory Biology (0)**

A preparatory course for students with no previous biology or laboratory science experience and for students needing additional background. Especially for prospective health science students. Register with advisement only.

**3 Lecture Hours, 3 Laboratory Hours.**

### BIO 111
**General Biology I (4)**

Principles of evolution and ecology as unifying themes in biology. Evolutionary processes and ecological adaptations illustrated by plant and animal diversity. Cellular life processes. Current environmental problems. The laboratory includes physically demanding field trips. Accommodations can be made for students with disabilities.

**3 Class Hours, 3 Laboratory Hours.**

### BIO 112
**General Biology II (4)**

Principles of evolution and ecology as unifying themes in biology. The human animal and its systems. Concepts of animal behavior. Classical genetics, current concepts of gene function and human genetics. Organismal growth and development. Current environmental problems. The laboratory includes physically demanding field trips. Accommodations can be made for students with disabilities.

**3 Class Hours, 3 Laboratory Hours.**

### BIO 115
**Ecology of the National Parks: Our Living Heritage (4)**

A biological survey of our National Park System concentrating on the variety of ways living organisms respond and adapt to meteorological, geological and ecological pressure.

**3 Class Hours, 3 Laboratory Hours.**

### BIO 117
**Principles of Biology I (4)**

To give science majors a working foundation of biology and to prepare them for transfer to a four-year institution and upper level biology courses. The biological principles covered include, but not limited to, ecology, animal behavior, conservation biology, ecology and zoology. The underlying themes of unity and diversity of living organisms will be used to amalgamate the topics covered. Scientific methodology will be emphasized in both laboratory and lecture using current publications to support discussion as well as developing and executing scientific experimentation.

**3 Class Hours, 3 Laboratory Hours; Prerequisite: High School Regents Biology and Regents Chemistry.**

### BIO 118
**Principles of Biology II (4)**

A continuation of Principles of Biology I. To give science majors a working foundation of biology to prepare them for transfer to a four-year institution and upper level biology courses. The biological principles covered include, but not limited to: Molecular Biology,

Cellular Structure and Function, and Genetics. The underlying themes of unity and diversity of living organisms will be used to amalgamate the topics covered. Scientific methodology will be emphasized in both laboratory and lecture using current publications to support discussion as well as developing and executing scientific experimentation.

**3 Class Hours, 3 Laboratory Hours; Prerequisite: BIO 117.**

### BIO 120
**Human Sexuality** **(3)**

Explores information about sexual attitudes, relationships, sexual anatomy, contraception, sexually transmitted disease, sexual physiology and dysfunction. Course aims to make students feel more comfortable thinking and talking about sex and to prepare them to make rational decisions about this important aspect of their lives.

**3 Class Hours**

### BIO 131
**Human Biology I** **(4)**

Normal structure (gross and microscopic) and function of the skeletal, muscular and nervous systems. Emphasis on physiology in lectures and on anatomy in laboratory, stressing those aspects which have greatest relevance to the student's curriculum.

**3 Class Hours, 2 Laboratory Hours.**

### BIO 132
**Human Biology II** **(4)**

A continuation of BIO 131 Human Biology I covering the circulatory, respiratory, digestive, urinary, reproductive and endocrine systems. Emphasis on physiology in lectures and on anatomy in laboratory, stressing those aspects which have greatest relevance to the student's curriculum.

**3 Class Hours, 2 Laboratory Hours; Prerequisite: BIO 131 Human Biology I or permission of chairperson.**

### BIO 140
**Pathophysiology** **(3)**

Symptoms, syndrome and etiology of pathogenic processes affecting the function and structure of the body.

**3 Class Hours; Prerequisite: BIO 132 Human Biology or permission of chairperson.**

### BIO 150
**Microbiology** **(4)**

The biology of the common bacteria and related microorganisms. General microbiology including asepsis, disinfection, sterilization, cultivation, pathogenicity, resistance, identification.

**3 Class Hours, 3 Laboratory Hours.**

### BIO 155
**DNA and Biotechnology** **(3)**

This course covers the basics of DNA allowing the student to understand today's rapidly expanding field of biotechnology. Topics will include: the human genome project, genetic testing, gene therapy, DNA and crime, genetic engineering, agricultural and industrial applications of biotechnology.

**3 Class Hours; one semester college biology or permission of instructor.**

### BIO 172-180
**Special Topics in Biology** **(1-2)**

Special courses covering particular topics in the biological sciences beyond the scope of the normal course offerings.

**Permission of Department Chairperson.**

### BIO 200
**Ecology: The Everglades** **(4)**

A scientific yet sensitive look at one of the world's rare and endangered wilderness areas. Everglades ecology is studied through an extensive wilderness camping experience in Everglades National Park, involving a minimum of 90 hours of classroom and field instruction. Offered during the January Intermission.

**3 Class Hours, 3 Laboratory Hours; Prerequisite: BIO 111 or equivalent; permission of Department Chairperson.**

### BIO 202
**Biology Seminar** **(1)**

The course is designed specifically for students interested in pursuing careers in the biological sciences. Students will be asked to critically analyze both current and historical readings, experiments and controversial topics within the field. An emphasis will be placed on showing the special niche of the biological sciences within the context of both the physical and social sciences. A weekend field trip is required.

**1 Class Hour; Prerequisites: BIO 111 and 112 or equivalent; permission of Department Chairperson.**

### BIO 218
**Ornithology** **(2)**

An in-depth study of the world of birds indigenous to the Northeast as well as a look at how humans have affected the survival of many avian populations. The course will cover the anatomy and physiology of birds; their habitats and behavior, including field identification of birds by sight and sounds.

**1 Class Hours, 2 Laboratory Hours; Prerequisite: BIO 112 or BIO 200**

### BIO 299
**Independent Study** **(1-3)**

An individual student project in a biological field which is beyond the scope of requirements of the courses offered by the department. Conducted under the direction of a Biology faculty member. Only one independent study course allowed per semester.

**1 - 3 Class Hours; Prerequisites: 3 semester hours of college level work in biology and approval of Department Chairperson.**

## BUSINESS INFORMATION TECHNOLOGY

### BIT 100
**Keyboarding** **(3)**

Development of basic keyboarding techniques and skill building activities in order to attain speed and accuracy in keying exact copy by touch for five minutes with a maximum of five errors.

**3 Class Hours; Prerequisite: For international students, ENG 107 - English as a Second Language or permission of instructor.**

### BIT 101
**Computer Keyboarding** **(1)**

Development of basic skills in keying exact copy by touch for three minutes with a maximum of three errors on a personal computer.

**1 Class Hour**

### BIT 104
**Keyboarding Speed Development** **(1)**

Individualized goal setting for reaching speed and accuracy standard necessary for entry-level employment.

**1 Class Hour; Prerequisite BIT 100 Keyboarding or equivalent.**

### BIT 108
**Introduction to the PC and Windows** **(1)**

Use of Windows and its graphical user interface to communicate with personal computers. Apply Windows features, concepts, applications, and procedures.

**1 Class Hour; Prerequisite: Keyboarding speed of 20 wam recommended.**

### BIT 110
**Business English** **(3)**

Comprehensive instruction in the use of reference materials and correct language usage. Students will have the opportunity to develop proficiency in correct usage of English grammar, punctuation, capitalization, and number style. Instruction in use and application of reference manual information.

**3 Class Hours**

### BIT 114
**Grammar Update** **(1)**

To review basic sentence structure, grammar, business vocabulary and punctuation as related to the business world. Does not correlate with any one 5-week segment of BIT 110.

**1 Class Hour**

### BIT 120
**Document Formatting** **(3)**

Introduction to general, medical, and legal vocabulary and the techniques of keyboarding documents for general, medical, and legal offices.

**3 Class Hours; Prerequisite: BIT 100 or the equivalent.**

### BIT 129
**Office Suite Mastery** **(.2)**

Preparation for the Microsoft Specialist proficiency test to become a certified specialist in an area of the office suite.

### BIT 130
**Word Processing Applications** **(3)**

Continuation of speed and accuracy development. Word processing functions using professional word processing software.

**3 Class Hours; Prerequisite: BIT 100 Keyboarding or equivalent.**

### BIT 140W
**Business Communications** **(3)**

Instruction in communicating effectively in a business environment. Students will have the opportunity to develop proficiency in writing effective sentences, paragraphs, and various types of business communications including memorandums, letters, outlines, and reports.

**3 Class Hours; Prerequisite for BIT majors: BIT 110.**

### BIT 160
**Intro to Computerized Financial Information Processing** **(1)**

Students will learn to utilize a PC and selected software to process personal financial information in order to prepare a budget, checks and a check register, bank reconciliation statement, determine the savings of purchasing with cash, and compute and prepare simple tax forms.

**1 Class Hour; Prerequisite: BIT 101 or the equivalent.**

### BIT 169
**Mastering the Internet and the WWW (3)**

This course is ideal for students in a broad range of disciplines who wish to become acquainted with the Internet and the world wide web. Develop the knowledge and skills necessary to send and receive e-mail messages, access the internet, use a graphical browser, transfer and manage files, experience various resource discovery and information retrieval tools, and compile reports that includes images and text. Complete your reports with references cited using the latest information from the online MLA or APA style manuals. Explore the technical requirements for a home system and the impact the Internet has made on society. Get ready to become part of the Internet community by designing and creating a personal web page.

**3 Class Hours; Prerequisite: BIT 101 Computer Keyboarding or the equivalent.**

### BIT 170
**Introduction to the Internet (1)**

Travel the information superhighway with skills taught in this course. You will learn to send and receive e-mail messages, access the internet, search for and retrieve information, and use a graphical browser.

**1 Class Hour; Prerequisite: BIT 101 Computer Keyboarding or the equivalent.**

### BIT 171
**Internet-Based Research (1)**

Exploration of additional Internet resources. Hands-on experience with various resource discovery and information retrieval tools.

**1 Class Hour; Prerequisite: BIT 170 Introduction to the Internet or the equivalent.**

### BIT 172
**Creating Personal Web Pages (1)**

Learn the basics of designing and creating your own web page using the composer feature of a popular web browser. Enhance your web page by incorporating images you create with the use of a digital camera and scanner.

**1 Class Hour; Prerequisite: BIT 170 Introduction to the Internet or equivalent.**

### BIT 173
**Basics of Website Creation (3)**

Potential web authors should start here! Develop the foundation for website creation including HTML, web graphics, and basic web editors. Understand the tools needed to incorporate animation, image maps, slide shows, and more into your web documents. Apply what you have learned to the creation of a website as a final project.

**3 Class Hours; Prerequisite: BIT 170 Introduction to the Internet or the equivalent.**

### BIT 174
**Introduction to HTML (1)**

Learn the basics of designing and creating a web page using a simple HTML Editor.

**1 Class Hour; Prerequisite: BIT 170 Introduction to the Internet or the equivalent.**

### BIT 175
**Web Graphics (1)**

Learn to create dynamic graphics for the world wide web. Graphics design and image creation using popular applications software will be emphasized.

**1 Class Hour; Prerequisite: BIT 174 Introduction to HTML or the equivalent.**

### BIT 176
**Using Web Editors (1)**

An introduction to WYSIWYG editors that allows students to deal with HTML on a design level rather than a technical one. Students will learn the features of a web page editor and how the program can help them design more quickly and efficiently. Bring together skills learned in BIT 174 Introduction to HTML and BIT 175 Web Graphics to spice up your web pages.

**1 Class Hour; Prerequisite: BIT 174 Introduction to HTML and BIT 175 Web Graphics or the equivalent.**

### BIT 180
**Computers and Communications (3)**

An introduction to the computer skills and knowledge vital for individuals pursuing a career requiring the use of computers for communications. A variety of software will be used. Students will be exposed to the PC and windows environment, the Internet, computer graphics and web page design and creation. Scanning and digitizing photographs will be introduced.

**3 Class Hours**

### BIT 182
**Designing Effective Web Pages (3)**

Experienced web designers will enhance their ability to create attractive, useful web sites by exploring the elements of good design. Issues such as audience identification, clarification of need, development of content, efficiency in use of files based on type and size, and an introduction to human factors in improving design will be explored. A popular commercial web authoring package will be used to create an attractive and effective web site as a final project.

**3 Class Hours; Prerequisite: BIT 173 Basics of Website Creation, or BIT 176 Using Web Editors, or the equivalent.**

### BIT 185
**Software Tools for Web/Print Publishers (3)**

An introduction to the software tools of choice used by print and web publishers. Students will learn to create, scan, and edit images and text for print, multimedia, and the web. Emphasis will be placed on drag-and-drop software integration. Combining still images and graphics will also be introduced.

**3 Class Hours**

### BIT 186
**Interactive Websites (3)**

Keep visitors returning to your website by adding interactivity to your pages. Understand if, when, and how to incorporate JavaScripts, Java Applets, CGI, and Dynamic HTML. Designing for full accessibility and validating web pages will be stressed. Create an interactive website as a final project.

**3 Class Hours; Prerequisite: BIT 173 Basics of Website Creation, or BIT 176 Using Web Editors, or the equivalent.**

### BIT 187
**Introduction to JavaScript (1)**

An introduction to the JavaScript programming language with an emphasis on enhancing the functionality of web pages. Students will learn to locate and customize existing JavaScript examples for their own use. Students will incorporate JavaScript programs in their own web pages.

**1 Class Hour; Prerequisite BIT 173 Basics of Website Creation, or BIT 176 Using Web Editors, or the equivalent.**

### BIT 188
**Dynamic HTML (1)**

An introduction to the use of Dynamic HTML to create web pages that are highly visual, animated, interactive, and programmed to respond to the surfer's platform and actions. Three technologies that make up Dynamic HTML will be covered: Cascading Style Sheets and CSS-Positioning, Active Scripts, and Document Object Model (DOM). These technologies will be used to create and change HTML elements "on the fly" after the page has been displayed.

**1 Class Hour; Prerequisite: BIT 173 Basics of Website Creation, or BIT 176 Using Web Editors, or the equivalent.**

### BIT 189
**Advanced Web Page Creation (1)**

This course will be project-oriented and will give the web designer the opportunity to enhance their web designs through "smart programming," multimedia and interactivity based upon the concepts learned in previous courses. Designing for full accessibility and validating web pages will be stressed. Getting connected, publishing a website, and orienting the site for business will be covered.

**1 Class Hour; Prerequisite: BIT 187 Introduction to JavaScript and BIT 188 Dynamic HTML or the equivalent.**

### BIT 190
**Animation for the Electronic Media (3)**

This course will introduce the student to the core principles of animation and how to use these principles to create animations for electronic presentations and web pages. Topics such as basic drawing, single frame and flip book animation styles, story boarding and composition will all be covered. Using Macromedia Flash and Microsoft PowerPoint students will learn how to add animations to their presentations and websites by creating animations with sound, buttons, and action.

**3 Class Hours**

### BIT 197
**Cooperative Work Experience (1-3)**

Cooperative work experience is provided for individuals pursuing a certificate program through the Business Information Technology department. On-the-job experience will be related to specific educational background and career goals of the student. Opportunities will be available in a variety of areas. Cooperative Work Experience students will meet with the coordinator on a regular basis.

**3 Class Hours; Prerequisite: 12 earned credits in the department.**

### BIT 200
**Spreadsheets with Business Applications (3)**

Creation of spreadsheets, use of database functions, and preparation of charts, using functions and features appropriate for business documents.

**3 Class Hours; Prequisite: BIT 101 Computer Keyboarding or the equivalent.**

### BIT 201
**Introduction to Spreadsheets (1)**

Use of basic spreadsheet functions for business-related applications.

**1 Class Hour; Prerequisite: BIT 101 Computer Keyboarding or the equivalent.**

### BIT 202
**Intermediate Spreadsheets** (1)

Use of spreadsheet and chart functions for business-related applications.

**1 Class Hour; Prerequisite: BIT 201 Introduction to Spreadsheets.**

### BIT 203
**Advanced Spreadsheets** (1)

Use of advanced features to enhance business-related applications for database, spreadsheets, and charting functions.

**1 Class Hour; Prerequisite: BIT 202 Intermediate Spreadsheets.**

### BIT 210
**Machine Transcription** (3)

Emphasis on increasing skill in proofreading and editing a variety of documents and transcribing recorded materials. Continuing development of knowledge of business vocabulary, grammar usage, punctuation, and spelling.

**3 Class Hours; Prerequisites: BIT 110 Basic Transcription and BIT 130.**

### BIT 240
**Desktop Publishing Using PageMaker** (3)

Become familiar with graphic design techniques, principles of page layout and design, and desktop publishing terminology and applications. Create a variety of documents such as flyers, brochures, newsletters and business cards. Become familiar with style sheets, templates, and importing material created in other software programs.

**3 Class Hours; Prerequisite: BIT 101 Keyboarding or the equivalent.**

### BIT 245
**Electronic Page Layout Using QuarkXpress** (3)

Use this powerful page layout program to set type and incorporate text and graphics in single and multiple-page documents in a Windows environment.

**3 Class Hours; Prerequisite: BIT 101 or the equivalent.**

### BIT 250
**Integrated Microsoft Office** (3)

Integrated Microsoft Office will acquaint students with operating systems, word processing, database management, spreadsheet applications, and presentation graphics. Students will prepare business documents by embedding and linking files.

**3 Class Hours; Prerequisite: BIT 101 or the equivalent.**

### BIT 251
**Introduction to Microsoft Word** (1)

Learn to use this popular word processing package to prepare simple letters, memos, and reports. Upon successful completion of this course, you will be able to create, store, and print routine business and/or personal documents efficiently.

**1 Class Hour; Prerequisite: BIT 101 or the equivalent.**

### BIT 252
**Introduction to Microsoft Excel** (1)

Use this popular software to prepare worksheets and charts. Learn to create and use multiple worksheets, link workbooks, create lists and macros, and use templates.

**1 Class Hour; Prerequisite: BIT 101 or the equivalent.**

### BIT 253
**Introduction to Microsoft Access** (1)

Use this popular database software to prepare tables and reports. Create and use queries to sort and select records.

**1 Class Hour; Prerequisite: BIT 101 or the equivalent.**

### BIT 254
**Introduction to PowerPoint** (1)

Learn to create simple text charts, data charts, speaker notes, handouts, and a screen show using a sophisticated graphics software package.

**1 Class Hour; Prerequisite: BIT 101 or the equivalent.**

### BIT 255
**Integrated Business Office Applications** (3)

Advanced office functions including integrating word processing, database, spreadsheets and presentation graphics. Preparation of business documents.

**3 Class Hours; Prerequisite: BIT 130.**

### BIT 265
**Project Management** (3)

This course is designed to prepare students in planning, organizing, and executing the steps in project development. Students will develop teamwork and time management skills to carry a project through its life cycle.

**3 Hours.**

### BIT 270
**Personal and Professional Development Seminar** (3)

Designed for any student who wishes to develop a personal and professional edge. Topics include interpersonal communication skills, organizational dynamics, personal, educational and professional career goal planning, time management, and personal and professional factors associated with success.

**3 Class Hours**

### BIT 275
**Advanced Business Communications** (3)

Instruction in advanced business communications skills. Students will have the opportunity to develop and demonstrate a variety of written, verbal and non-verbal communication skills through the design, development, and presentation of a communication project.

**3 Credit Hours; Prerequisite: BIT 110, BIT 140W, or departmental approval.**

### BIT 280
**Office Administration** (3)

This course is designed to help students understand the modern administrative practices of office management. Emphasis is placed on planning and organizing office operations, leadership and human relations in the office; familiarization with the budget process, and controlling office operations, including office systems, work measurement, and standards. Decision-making skills are developed through problem analysis techniques.

**3 Class Hours**

### BIT 290
**Special Topics in Business Technologies** (1-3)

Topics in this course will acquaint the students with current advances and techniques in business, communications, and information technologies. Course topics may include Intranet, creation of multimedia documents, qualitative research methodology, and digital audio transcription technology.

**1-3 Class Hours; Prerequisite: Departmental approval.**

### BIT 297
**Internship** (1-3)

Career-related experience that complements academic preparation in the business technologies area. Interns receive on-the-job experience in business setting and meet with the internship coordinator as scheduled.

**Prerequisite: Departmental Approval.**

### BIT 299
**Independent Study** (1-4)

Under the guidance of a faculty member, the student will undertake a study, project, or research involving an advanced concept or problem relating to her/his major field of study. Only one independent study course is allowed each semester.

**1-4 Class Hours; Prerequisite: Approval of faculty member and Department Chairperson.**

## BANKING

### BNK 162
**Deposit Operations** (2)

Examines the U.S. payment system of today and tomorrow. Bank deposit-taking activities, management of deposited funds, trends in EFT.

**2 Class Hours**

### BNK 168
**Principles of Banking** (3)

A core course that examines all aspects of banking. A comprehensive introduction to today's diversified bank services. Bank accounting, pricing, profitability, personnel and security functions.

**3 Class Hours**

### BNK 173
**Marketing for Bankers** (3)

A thorough examination of basic marketing principles and practices and their application to the banking industry. Designed for entry level through mid-management level employees.

**3 Class Hours**

### BNK 174
**Money & Banking** (3)

Basic economic principles as they relate to banking. This course, designed for bank personnel in customer contact positions, management trainees and mid-management entry personnel, provides the foundation for further banking study.

**3 Class Hours**

### BNK 176
**Law and Banking Principles** (3)

Sources and applications of banking law. Torts and crimes, contracts, real and personal property, bankruptcy, legal implications of consumer lending.

**3 Class Hours**

### BNK 180
**Economics for Bankers** (3)

This course introduces you to the fundamentals of economics. Special emphasis is placed on macroeconomics and topics important to bankers. The course covers the basics of economic theory and

includes examples of the application of economics to banking.

### BNK 182
**Consumer Lending** (3)

Designed for entry level and consumer credit personnel. An overview of consumer credit. Evaluating credit risks, consumer credit policy, servicing and collecting loans, consumer compliance, documentation, portfolio management and marketing.

**3 Class Hours**

### BNK 184
**Banking/Real Estate/Mortgage Practicum** (4)

Designed for students without previous exposure to the financial industry chosen. Student will observe and study operations, policies and procedures performed by employees in various settings (private, public agencies, commercial corporations, etc.) Emphasis placed on client, professional support and competition interaction (both front and back office). Students may be placed with companies specializing in Banking/Credit Union Services and/or Real Estate Sales and/or Mortgage Brokerage. Final report integrating the practical and theoretical aspects of their experiences.

**4 Class Hours; Prerequisite: 15 credits of coursework, 9 in Business or permission of instructor.**

### BNK 185
**Corporate Banking** (3)

A pragmatic approach to understanding the lending environment within a bank. The course provides the less experienced commercial lender with a firm grasp of the sequential nature of the lending process. Emphasis is on a practical technical approach.

**3 Class Hours**

### BNK 198
**Law and Banking: Applications** (3)

An introduction to laws pertaining to secured transactions, letters of credit and the bank collection process. Check losses, collateral, perfection and default.

**3 Class Hours**

### BNK 199
**Analyzing Financial Statements** (3)

For the bank lender/credit analyst. How financial data is generated and its limitations. Flow of business funds, selecting and interpreting financial ratios.

**3 Class Hours; Prerequisite: BUS 100 Accounting I and BUS 101 Accounting II.**

## BUSINESS

### BUS 100
**Accounting I** (4)

Introduction to accounting principles and procedures necessary to complete the accounting cycle. The course includes journals, ledgers and financial statements. Accounting for merchandising transactions, control of cash, internal control. and payroll. Course includes computerized accounting applications.

**4 Class Hours**

### BUS 101
**Accounting II** (4)

An expansion of the fundamental concepts and procedures of accounting. The course includes inventory valuation, receivables, payables and cash flows. The acquisition, depreciation and disposal of plant assets. Accounting methods and procedures relating to partnerships and the corporate form of business organization. Manufacturing with emphasis on the special problems and additional accounting procedures to measure, control, and report factory production costs. Course includes computerized accounting application.

**4 Class Hours; Prerequisite: BUS 100 Accounting I or BUS 111 Financial Accounting.**

### BUS 107
**The Freshman Experience**

An introduction to college life and the world of business for the beginning student in the Department of Business. College and departmental policies and procedures, academic advisement and registration, study skills, transfer and employment, College and departmental resources. Study of current trends and issues using a daily or weekly business publication. Required course for all first semester business students.

**1 Class Hour**

### BUS 108
**Accounting for a Service Business** (4)

Introduction to basic accounting procedures. Topics include journals and ledgers, fundamental financial statements, cash and credit transactions, internal control over cash, bank reconciliation and the adjustment to cash, merchandise transactions and special journals, estimating and recording credit losses, payroll procedures, and journal entries. Includes a major project using the computerized accounting program Quickbooks Pro. (May not be used as a prerequisite for BUS 101, see BUS 100.)

**4 Class Hours**

### BUS 110
**Introduction to Business** (3)

General background of modern business practices through the study of organization and management, production, human resources, accounting and finance, marketing, and the information needed for control and management decisions in business and society.

**3 Class Hours**

### BUS 111
**Financial Accounting**

A comprehensive introduction to financial accounting concepts and techniques intended to provide a basic understanding of the accounting cycle, elements of financial statements, and interpretations. Elements examined include the creation of financial statements, accounting as an information system, accrual concepts, merchandising operations, inventory, internal control, cash, receivables, long-lived assets, liabilities, stockholders' equity, investments, cash flows, and financial analysis.

**4 Class Hours**

### BUS 112
**Quantitative Business Methods**

Quantitative analysis of contemporary business problems. The course includes percentages, ratios, markup/markdown, cash and trade discounts. Simple and compound interest, consumer credit and insurance. Present value, future value, and annuities. An introduction to statistics and graphical analysis.

### BUS 115
**Business Statistics** (3)

Concepts and mechanics of measures of central tendency, measures of dispersion, probability, sampling theory, estimation, hypothesis testing, regression and correlation as they relate to general problems in business and economics.

**3 Class Hours; Prerequisite: MAT 092 Foundations for College Mathematics II or equivalent (course one high school math).**

### BUS 116
**International Business Environments** (3)

An overview of the social, cultural, political, and economic factors that influence the trade related interaction of nations and the operations of global business enterprises. Trade theory, economic integration, global sourcing, export-import basics, cultural awareness, and other current topics relating to international business will be covered.

### BUS 118
**Business Law I** (3)

Law as an evolutionary and democratic process. Topics include torts and criminal law, court structure, ethical issues in business, administrative law, law-of-contracts, legal principles of agency, employment rights and an introduction to business organizations including partnerships.

**3 Class Hours**

### BUS 120
**Business Law II** (3)

The law governing the negotiation or transfer of commercial paper, law of sales, law of personal and real property, bailments, secured transactions, landlord-tenant relationships and an introduction to corporate law. This course is included in the campus general education requirements as a writing emphasis course.

**3 Class Hours; Prerequisite: BUS 118 Business Law I.**

### BUS 129
**Consumer Behavior** (3)

Emphasizes the development of how people make purchase decisions in the marketplace. Consumer decision making, learning, brand loyalty and market segmentation.

**3 Class Hours**

### BUS 130
**Retail Management** (3)

Techniques involved in planning, organization, control and operation of diverse retail establishments. Trading area analysis, warehousing, inventory control, customer relations. Case studies, field trips.

**3 Class Hours; Prerequisite: BUS 264 Retailing.**

### BUS 131
**Personal Finance** (3)

Guidelines for financial planning regarding long-term and short-term installments buying, i.e., homes, autos, etc., credit, insurances, taxes, savings, budgeting, and investments in real estate, stocks, bonds, IRA's, mutual funds, money market accounts, etc.

**3 Class Hours**

### BUS 135
**Investments** (3)

In depth study of investing in the electronic age. Selection, analysis, and valuation of stocks, Mutual Funds, REIT's, Unit Investment Trusts, Fixed Income Securities, Government Securities, Options, futures, and retirement/pension choices. Non-Financial Assets such as collectibles and precious metals as tools of investing. Using the Internet to gather investment information.

### BUS 141
**Marketing** (3)

Introductory study of Marketing as an art and a science. Analysis of the basic principles and practices

necessary to complete the marketing cycle effectively. Marketing of goods and services, from conception of the original product idea to delivery to the ultimate consumer. Marketing mix, marketing concept, environmental and societal constraints. Lecture, discussion, cases.

**3 Class Hours**

### BUS 142
**Marketing for the Non-Profit Organizations (3)**

Introductory study of marketing for organizations that operate in the pubic interest without a profit motive. Analysis of the differences and similarities of profit-oriented and non-profit marketing. Emphasis of the exchange process, marketing concept, and environmental and societal constraints. This course is designed to assist non-profit organizations or individuals in applying the appropriate marketing concepts and strategies to generate adequate financial and public support. Lecture, cases, and discussions.

**3 Class Hours**

### BUS 152
**Selling Fundamentals (3)**

Principles of sales with practical application. Steps leading to a successful sale — prospecting, planning and delivering, dramatizing, handling objections, closing, building good will. Development and presentation of a complete procedure for a product or service. Closed-circuit television used to critique sales presentations.

**3 Class Hours**

### BUS 163
**Real Estate for Salespersons (2)**

Designed to meet New York state requirements for licensure as a real estate salesperson. Land use regulation, law of contracts, real estate instruments, real estate mathematics, real estate finance, closing and closing costs, brokerage and the law of agency, valuation and listing procedures, license law and ethics, human rights and fair housing.

**2 Class Hours, 1 Laboratory Hour.**

### BUS 164
**Real Estate for Brokers (3)**

Designed to meet New York state requirements for licensure as a real estate broker. Land use regulation, operation of a real estate broker's office, general business law construction, subdivision and development, leases and agreements, liens and easements, taxes and assessments, investment property, property management, condominiums and cooperatives, appraisal, advertising, rent regulations.

**3 Class Hours; Prerequisite: BUS 163 Real Estate for Salespersons.**

### BUS 170
**Insurance for Agents and Brokers (7)**

Comprehensive survey of insurance. Fire, marine, automobile, owner liability, burglary, boiler, machinery, accident and health, fidelity and surety insurance, insurance law and duties of the agent. Designed to meet requirements for the N.Y.S. property and casualty insurance license.

**7 Class Hours**

### BUS 172
**NYS Life/Health Insurance Licensing (2)**

Prepares students to complete New York State licensing exams in life, accident, and health insurance. Life Insurance Principles, Uses, Insurance Contracts, Group Insurance, Annuities, Social Security Programming, Laws on Insurance, Accident & Health Necessity, Accident & Health Insurance Terminology, Accident & Health Risk Selection, Types of Accident & Health Policies, Statutory Plans, Types of Accident & Health Carriers, Types of Accident & Health Coverage, Statutory Policy Provision, Agency Duties & Responsibilities.

**2 Class Hours, 1 Laboratory Hour.**

### BUS 181
**The Internet with Business Applications (3)**

In depth examination of the internet and how It is used by modern business. Use of tools such as browsers, e-mail, FTP, and website construction software. Strategic issues in the design of an effective business website, including the construction of an actual site. Discussion of contemporary issues and trends.

**3 Class Hours**

### BUS 183
**Securities Training Series (Series 6 and 63) (3)**

This course is designed for individuals who will be selling only investment company products (eg. mutual funds, money market funds) and variable contracts for an NASD (National Association of Securities Dealer) broker-dealer or a bank affiliate. The Series 6/Series 63 course will effectively prepare them for the qualifying exams (Series 6-Federal, Series 63-NYS).

**3 Class Hours, 1 Laboratory Hour.**

### BUS 184
**Financial and Risk Management Practicum (4)**

Designed for students without previous exposure to the financial industry chosen. Student will observe and study operations, policies and procedures performed by employees in various settings (private, public agencies, commercial corporations, etc.) Emphasis placed on client, professional support and competition interaction (both front and back office). Students may be placed with companies specializing in Financial Planning/Investing and/or Personal and Business Life and Accident and Health Insurance and/or Pension and Benefits Administration. Final report integrating the practical and theoretical aspects of their experiences.

**4 Class Hours; Prerequisite: 15 hours of course work, 9 in Business or permission of Instructor.**

### BUS 188
**Income Tax I (3)**

An introduction to individual federal income tax concepts and applications including tax policy considerations and the historical development of tax law. Develops the concepts of gross income, capital gains and losses, itemized deductions, employee expenses, deferred compensation, depreciation, property transactions, tax credits and tax planning. Emphasis on tax theory and practical application of theory by preparing returns manually and with tax preparation software.

**3 Class Hours**

### BUS 190
**Marketing and the World Wide Web (3)**

An introduction to basic marketing principles and practices. Emphasis on global aspects of marketing, consumer understanding, identification of target markets, and basic elements of advertising on the Internet. An examination of how businesses design websites with specific emphasis on customer service and evaluation of customer responses.

**3 Class Hours; Prerequisite: Prior knowledge of e-mail, Internet, and HTML recommended.**

### BUS 200
**Intermediate Accounting I (4)**

An intensive study of accounting theory and procedures. Emphasis on the balance sheet accounts and their inter-relationship with income statement accounts, the accounting process, and correction of errors. Advanced treatment of cash, receivables, and inventories.

**4 Class Hours; Prerequisite: BUS 101 Accounting II.**

### BUS 201
**Intermediate Accounting II (4)**

A more advanced treatment of accounting for property, plant, equipment, intangible assets, current and long-term liabilities. Corporation accounting, funds flow reporting, financial statement analysis.

**4 Class Hours; Prerequisite: BUS 200 Intermediate Accounting I.**

### BUS 202
**Securities Training Series 7 (3)**

This course will effectively prepare individuals to pass the General Securities nyse/nasd Registered Representative Examination. The Series 7 license permits individuals to engage in sales and trading activities related to a variety of products including stocks, bonds, mutual funds, municipal securities, options, and direct participation programs.

**3 Class Hours, 1 Laboratory Hour.**

### BUS 205
**Cost Accounting (4)**

Nature and purpose of Cost Accounting and Cost Management. Examine job-order, process, operation, and activity-based costing environments and accounting systems. Accounting for the allocation of manufacturing overhead, common costs, and joint costs. Comparison of absorption, variable, and throughput costing methods. Constructing budgets, emphasizing the flexible budgeting system, and the "analysis of variances" methods.

**4 Class Hours; Prerequisite: BUS 210 Managerial Accounting.**

### BUS 209
**Operations Management (3)**

A study of the overall production-related activities of a manufacturing firm. Topics include: project planning, capacity planning, scheduling, inventory management, MRP, JIT, CIM and TQM.

**3 Class Hours**

### BUS 210
**Managerial Accounting (4)**

Accounting for managerial analysis and decision making, providing an analysis of accounting data useful in the planning and control functions of a firm. Study of cost concepts, break-even, cost estimation, differential accounting, responsibility accounting, capital budgeting.

**4 Class Hours; Prerequisite: BUS 101 Accounting II or BUS 111 Financial Accounting.**

### BUS 214
**Customer Service (3)**

A comprehensive survey of all aspects of customer service. Analysis of basic principles and practices leading to in-depth consideration of customer service specifics. Topics covered will include measuring cus-

tomer satisfaction, managing customer service, telephone skills, handling difficult customers, and multicultural customer service. Other areas of customer service will be examined as current circumstances and areas of interest dictate. This course is the capstone course for the customer service certificate program, but is of value to anyone interested in building customer satisfaction and loyalty.

### BUS 216
**Special Topics in International Business** **(3)**

This course is designed to study current international, regional, country-specific, industry, and firm-based issues related to concepts in international business practice and environment. Working individually and/or in a group the student will engage in critical analysis of a broad range of selected readings and case studies. Application of concepts in global economic and business theory presented by the student through writing and discussion.

**3 Class Hours; Prerequisite: International Business major and BUS 116 or SOS 116 (International Business Environments), or permission of instructor.**

### BUS 224
**Business Finance** **(3)**

Financial principles and procedures of capital management. Analysis of the relationship of finance to micro and macroeconomic factors such as inflation, business cycles, competition, and regulation. Emphasis on corporate goals and objectives as a determining factor in the choice of financial management policy. Financial ratios, cash budgeting, forecasting, leverage, working capital policy, capital markets, stocks and bonds, valuation, and other basic areas of finance.

**3 Class Hours; Prerequisite: BUS 101 Accounting II or BUS 111 Financial Accounting, MAT 092 or Equivalent and CST 105 or Equivalent.**

### BUS 229
**Advertising** **(4)**

Development, economics, functions of advertising. Cost application, media, testing and research methods. Development of advertisements, copy and layout, methods and problems of reproduction. Planning the advertising campaigns with step-by-step developments. Lectures, discussions, demonstrations. Students are required to use the computer to generate graphics. BUS 141 Marketing is recommended as preparation for this course.

**4 Class Hours**

### BUS 238
**Marketing Research** **(3)**

Methods of collecting and interpreting marketing information which affects marketing management. Specific applications to problem identification in market development, gauging market potential and implementation of research designs in the marketplace.

**3 Class Hours**

### BUS 240
**Labor/Management Relations** **(3)**

An examination of the complex and dynamic interaction between management and organized labor. Coverage will include the origin and growth of unions and emphasize the legal, managerial, economic, and human factors relevant to past and current labor/management relations. The contract negotiation process and internal union structure will also be covered along with other current and timely topics. Lecture, Discussion, Case Studies, and Case Law.

**3 Class Hours**

### BUS 242
**Marketing Seminar** **(3)**

Senior capstone course which integrates various business subjects previously studied. Individual and team approach are utilized to analyze comprehensive marketing and management cases. A competitive computer based marketing simulation will give students a realistic view of the dynamic interaction of various marketing and management forces. This course is student centered and focuses on interpretation of marketing information and the development of critical thinking skills. Cases, computer simulation, discussion.

**3 Class Hours; Prerequisite: BUS 141 Marketing, Non-marketing majors must have instructor's permission.**

### BUS 244
**Employment Law** **(3)**

An introductory study of employment law. Emphasis on statutory interpretation, case law and the overall legal environment. Lecture, discussion, and legislation intent will be discussed.

**3 Class Hours**

### BUS 245
**Management: A Behavioral Approach** **(3)**

An analysis of individual and group behavior, leadership, and culture of an organization. Emphasis is placed on the psychological, sociological and other variables useful in understanding organizational behavior. Major topics include motivation, decision making, communication, group dynamics, organizational change, leadership and other related aspects of organizational behavior.

### BUS 246
**Principles of Management** **(3)**

Principles of managerial practices. Planning, organizing, directing and controlling. Exposes students to proper methods and techniques to achieve employee and job satisfaction. Topics covered include scientific management, behavioral theory and introduction to management science.

**3 Class Hours**

### BUS 248
**Human Resource Management** **(3)**

Acquisition, development, maintenance, and utilization of a workforce within an organization. Job Analysis, recruitment and selection, training and development, equal opportunity law, wage/benefit administration, and union-management relations are focus areas of this course. Other timely topics such as sexual harrassment and the current regulatory environment are examined as circumstances dictate. Lecture, cases, discussion.

**3 Class Hours**

### BUS 251
**Advanced Topics in Human Resource Management** **(3)**

An in-depth continuation of the study of concepts introduced in an introductory human resource management course. Focus will be on increasing the depth and breadth of students knowledge in specific HRM topics with an emphasis on current issues. This course will use a theoretical and practical approach to demonstrate the concepts and application of major topic areas such as; staffing, compensation management, public policy and the regulatory environment, human resource development, and collective bargaining. Additional topics will be addressed as circumstances dictate. Interactive learning is stressed through discussion, cases, and experiential exercises.

**3 Lecture Hours per week; 3 Semester Credits; Prerequisite: BUS 248 Human Resource Management or Permission of the Instructor.**

### BUS 262
**Small Business Management** **(3)**

An overview designed for those interested in small business as owner-managers. Development of modern management techniques covering forms of organization, site acquisition and location, insurance, marketing, financing, pricing, break-even, permits, license and franchising.

**3 Class Hours**

### BUS 263
**Small Business Seminar** **(4)**

An intensive study of the various facets involved in organizing and operating a small business venture. Researching and evaluating business opportunities, establishing a buying/selling price for the business, small business taxation, analyzing and solving business problems, using information to manage marketing ideas. Heavy emphasis on development of the business plan and preparation of the loan proposal.

**4 Class Hours; Prerequisite: BUS 101 Accounting II.**

### BUS 266
**Advertising and Promotion for Small Business** **(4)**

A comprehensive study emphasizing "hands on" approach to small business advertising and promotion. Functions of advertising and promotion, budgeting, media selection, cost consideration, development of copy and layout. Students will use various media, including television, in the preparation of an advertising campaign. Current information on public relations and merchandising. Store layout and design, sales promotion, dealer programs and co-op advertising.

**4 Class Hours**

### BUS 267
**Retailing in a Service Economy** **(3)**

The history and overview of Retailing and the growth of the Service Sector economy. Covers the changes occurring in the distribution of goods and services including the growth of franchises, direct marketing and service businesses. The changes in retail structures, i.e., the demise of urban centers and traditional department stores and the growth of shopping centers, malls, and specialty retailers, are central to this course.

**3 Class Hours**

### BUS 268
**PHR Certificate Directed Study** **(4)**

This course is designed to prepare the student to sit for the Human Resource Certification Institute examination. A seminar approach will be used to explore all major areas of human resource management. Students will be actively involved in the learning process and will collaborate along with the instructor to develop the depth of understanding necessary to be certified as a human resource professional.

**4 Hours Lecture per week; 4 Semester Credits; Prerequisite: None.**

**NOTE:** This course prepares the student for, but does not guarantee certification.

### BUS 269
**Business Reports and Computer Communications (3)**

Methods and skills for formal and informal business writing through the logical analysis of business case problems. Emphasis on utilizing the computer in the preparation, transmittal, and retrieval of business information and reports. Proper construction of business charts, graphs, tables, and graphics, using various computer software. Students learn to properly construct business letters, memos, bids, quotes, and other business reports and documents. Transmitting business reports using E-mail. Accessing and transmitting business information using the computer.

3 Class Hours

### BUS 275
**Accounting Information Systems (4)**

Computer-based accounting systems with emphasis on development and implementation. Topics will include: creation of a general ledger, establishment of accounts receivable and billing procedures, management of cash and current liabilities, and payroll accounting. Also to be addressed is the development of a variety of custom management reports. The course will be divided into two parts. During part one students will learn the tools necessary to implement an accounting system. Part two will consist of students working in teams to develop a system.

**Prerequisite: BUS 200 or permission of instructor.**

### BUS 297
**Cooperative Work Experience (1-3)**

Cooperative education is available to students in the marketing management, marketing sales and accounting curricula. On-the-job experience may be obtained in such areas as retailing, banking, fast foods, government services and hotel management, as well as CPA firms, public accounting offices, industrial, business and government offices where accounting is performed. Cooperative work students will meet with the coordinator one hour each week.

**Prerequisite: Full-time student (minimum of 12 credit hours) maintaining an overall grade-point average of 2.5, with 3.00 in Business courses and no F's.**

### BUS 299
**Independent Study (1-4)**

The student, under the guidance of a faculty member, undertakes an investigation, study and research in an advanced concept or problem concerning his/her major field of study. Only one independent study course is allowed per semester.

**Prerequisite: Approval of faculty member and department chairperson.**

## CERTIFIED DENTAL ASSISTING

### CDA 101
**Dental Assisting I (1)**

Introduction to the basic theory involved in dental assisting treatment areas, instruments and procedures. Includes emphasis on oral evacuation, instrument transfer, the dental dam and data gathering. Specialty areas covered will be endodontics, oral and maxillofacial surgery and prosthodontics.

**1 Lecture Hour; Corequisites: CDA 101L Dental Assisting I Lab, CDA 112 Oral Anatomy and Physiology; Prerequisite: CDA 110 Infection Control or permission of the department.**

### CDA 101L
**Dental Assisting I Laboratory (2)**

Preclinical/clinical experiences in the procedures of dental assisting. Emphasis on preparing treatment areas, data gathering, oral evacuation, instrument transfer and placing the dental dam. Specialty procedures include endodontics, oral and maxillofacial surgery and prosthodontics.

**6 Laboratory Hours; Corequisite: CDA Dental Assisting I Lecture or permission of the department.**

### CDA 102
**Practice Management & Computers (1)**

Basic concepts of business office management and bookkeeping including the role of the computer in the dental practice. Marketing, appointment control, records management, accounts receivable and payable will be discussed. Business communications including developing professional correspondence and a resume will be taught with an emphasis on concepts of oral and written communication skills.

1 Lecture Hour

### CDA 103
**Ethics/Legal Aspects & Professionalism (1.5)**

Overview of dental ethics and jurisprudence and professionalism in the dental office. Risk management with an emphasis on malpractice, consent and refusal of treatment.

The student will develop his/her written and oral communication skills by using the Physician's Desk Reference to research medications from patient histories, by practicing legal documentation on patient charts, conducting history interviews, giving verbal and written post operative instructions and writing sample "termination of care" letters. The student will also become familiar with the various professional journals in the library.

1.5 Lecture Hours

### CDA 104
**Introduction to Biomedical Sciences (2)**

Basic introduction to the sciences of anatomy and physiology, microbiology and nutrition. The intent of this course is to present basic theoretical concepts of importance in the appreciation and understanding of dental care and its delivery.

2 Lecture Hours.

### CDA 105
**Dental Assisting II (2)**

The first 15 hours of the class is a continuation of CDA 101, Dental Assisting I, with an emphasis on the following dental specialties: oral surgery, endodontics, periodontics, prosthodontics, pedodontics and orthodontics. The second half of the class will be devoted to taking vital signs and recognizing the signs and symptoms of various emergencies that occur in the dental setting. There will also be a brief review of BLS and CPR.

**2 Lecture Hours; Prerequisite: CDA 101 Dental Assisting I or permission of the department; Corequisite: CDA 105L Dental Assisting II Lab.**

### CDA 105L
**Dental Assisting II Laboratory (2)**

Clinical and laboratory experience with an emphasis on specialty procedures including endodontics, oral surgery, prosthodontics, pedodontics, periodontics and orthodontics.

**6 Laboratory Hours; Prerequisites: CDA 101L Dental Assisting I Lab or permission of the department; Corequisite: CDA 105 Dental Assisting II Lecture or permission of the department.**

### CDA 106L
**Clinical Practice (1)**

Directed practice experience for certified dental assisting students in dental offices or dental clinics.

**4 Lab Hours; Prerequisites: student must have successfully completed all courses in the summer and first semester of the program; Corequisites: CDA 105 Dental Assisting II and CDA 105L Dental Assisting II Lab or permission of the department.**

### CDA 107
**Introductory Oral Pathology & Dental Therapeutics (2)**

Introduction to oral pathology and dental therapeutics. Basic concepts of disease and disturbances of the oral cavity and their impact on general health. Presentation of pharmacology and pain control as they relate to the dental office including types and administration of drugs, analgesics, sedation and nitrous oxide, general anesthesia and local anesthetics.

2 Lecture Hours.

### CDA 108
**Oral Health Education & Preventive Dentistry (2)**

Introduction to the key concepts in oral health education and preventive dentistry. Although the emphasis is on patient motivation and education, fluorides and plaque control, the student will also develop skills for initiating behavior modification and smoking cessation programs. The student will assess the needs and develop patient education techniques for all age groups and the special needs patient.

**2 Lecture Hours; Prerequisite: CDA 104 Introduction to Biomedical Sciences or permission of the department.**

### CDA 110
**Infection Control (1)**

Theory in infection control in dentistry, including responsibility for infection control practices, transmission of disease and methods for preventing disease transmission in the dental office. There will be an increased emphasis on oral and written communication.

1 Lecture Hour

### CDA 112
**Oral Anatomy & Physiology (2.5)**

Normal structure and function of the oral cavity, head and neck (microscopic and gross) as well as abnormalities will be discussed. Terminology of basic structures, diseases and concepts will be included and the student will gain an understanding of the use of these terms in the dental profession.

2.5 Lecture Hours

### CDA 114
**Radiography Theory (2)**

Understanding radiation including radiation principles; radiation health, safety and protection; radiographic quality, intraoral techniques, film processing and mounting interpretation of radiographic errors and recognition of anatomical landmarks; legal factors.

2 Lecture Hours.

### CDA 116
**Dental Materials (2)**

Composition, chemical and physical properties, use and manipulation of material used in dental laboratory and operatory.

**2 Lecture Hours.**

## CHEMISTRY

### CHM 090
**Preparatory Chemistry (0)**

Introductory course in chemistry emphasizing problem-solving techniques related to chemical concepts. Atomic structure, stoichiometry, metric units, chemical bonding.

**3 Class Hours, 3 Laboratory Hours; Prerequisite: MAT 096 Elementary Algebra and Trigonometry.**

### CHM 120
**Fundamental Chemistry (4)**

Composition of substances, atomic structure, periodicity, bonding, chemical equations, state of matter, aqueous solutions, pH, and an introduction to organic chemistry and biochemistry.

**3 Class Hours, 3 Laboratory Hours; Prerequisite: MAT 090 Foundations for College Mathematics.**

### CHM 121
**Forensic Sciences (4)**

The science behind the examination of firearms, cartridges, explosives, drugs and other types of physical evidence by the crime lab is presented. Emphasis on proper handling of substances found in crime scene investigations. Laboratory techniques include many modern instrumental methods, such as gas chromatography, infrared and mass spectroscopy as used in today's modern crime labs.

**3 Class Hours, 3 Laboratory Hours.**

### CHM 123
**Environmental Science (3)**

Is your water safe to drink? Worry about hotter climates, holes in the ozone layer, pesticide residues in food, and extinction of species? This course is designed to give the student a better scientific background for understanding the environment from a chemical viewpoint and do hands on laboratory investigations to better appreciate the ecosystem in which we live.

**3 Class Hours; Corequisite: CHM 123L Environmental Science Laboratory.**

### CHM 123L
**Environmental Science Laboratory (1)**

Experiments in drinking water, groundwater, air, and soil analysis using EPA methodology. Analysis will include Gas Chromatography, Mass Spectrometry, Liquid Chromatography, Microbiology and Atomic Absorption Spectroscopy of real world samples.

**3 Laboratory Hours; Corequisite: CHM 123 Environmental Science.**

### CHM 125
**Chemistry (3)**

Fundamental concepts of inorganic chemistry. Composition of substances, kinetic and molecular theories, atomic structure and bonding, solutions and colloids, ions in solution and introduction to organic chemistry. For Fire Protection Technology students.

**2 Class Hours, 3 Laboratory Hours.**

### CHM 133
**Survey of Organic Chemistry (2)**

Fundamental treatment of organic chemistry, nomenclature, properties of selected functional groups, mechanisms, stereochemistry and synthetic methods. Special emphasis on biomolecules such as lipids, carbohydrates, nucleic acids, vitamins and medicinally active compounds.

**2 Class Hours; Prerequisite: CHM 145 Chemistry I and CHM 145 Chemistry Laboratory I; Corequisite: CHM 146 Chemistry II and CHM 146 Chemistry Laboratory II and CHM 133L Survey of Organic Chemistry Laboratory.**

### CHM 133L
**Survey of Organic Chemistry Laboratory (1)**

Emphasis on techniques on separation, identification and purification by classical and instrumental methods such as gas chromatography and spectroscopy, and selected experiments with biomolecules.

**3 Laboratory Hours; Prerequisite: CHM 145 Chemistry Laboratory; Corequisite: CHM 133 Survey of Organic Chemistry.**

### CHM 141
**General, Organic, and Biochemistry I (3)**

Introductory treatment of general chemistry for the non-science student emphasizing applications of chemistry in everyday life. Measurements, atoms and bonding, the states of matter, nuclear processes, oxidation and reduction, solutions, acids and bases. Applications include energy sources, effects of radiation, the environment, life processes, testing of advertising claims. For Liberal Arts non-science students.

**3 Class Hours; Prerequisite: MAT 092 Foundations for College Math II; Prerequisite or Corequisite: CHM 141L General Chemistry Laboratory I.**

### CHM 141L
**General, Organic, and Biochemistry Laboratory I (1)**

Experiments to introduce chemical laboratory techniques while increasing awareness of the chemical world and to attain some insight into how a chemist attacks a problem. Qualitative and quantitative measurements.

**3 Laboratory Hours; Corequisite: CHM 141 General Organic and Biochemistry I.**

### CHM 142
**General, Organic and Biochemistry II (3)**

Continuation of CHM 141 General, Organic and Biochemistry I. A survey of organic chemistry including nomenclature, reactions of selected functional groups, stereochemistry and biochemistry. Applications include consumer products, living systems, food and metabolism. For Liberal Arts non-science and Allied Health students.

**3 Class Hours; Prerequisite: CHM 141 General, Organic and Biochemistry I; Prerequisite or Corequisite CHM 142L. General Chemistry Laboratory II.**

### CHM 142L
**General Organic and Biochemistry Laboratory II (1)**

A continuation of CHM 141L General Chemistry Laboratory emphasizing organic and biochemical experiments which substantiate classroom lectures.

**3 Laboratory Hours; Corequisite: CHM 142 General Organic and Biochemistry II.**

### CHM 145
**Chemistry (3)**

Comprehensive treatment of general chemistry for the science-oriented student. Builds on their prior chemistry, with emphasis on the basic laws and theories of chemistry and their derivation from experimental evidence. Presents the qualitative and quantitative aspects of matter's composition and changes and their unifying principles. Includes physical and chemical properties, periodicity of elements, stoichiometry, current atomic and bonding theories, laws and theories of physical states and changes of state, solution chemistry, and thermochemistry.

**3 Class Hours; Prerequisite: Regents Chemistry (75 minimum final grade) or CHM 090 Preparatory Chemistry and Math A (minimum grade of 85) or MAT 096 Elementary Algebra and Trigonometry or Corequisite: CHM 145L Chemistry Laboratory.**

### CHM 145L
**Chemistry Laboratory (1)**

Laboratory experiments to emphasize the empirical basis for the principles discussed in lecture and the proper gathering and interpretation of experimental data.

**3 Laboratory Hours; Corequisite: CHM 145 Chemistry.**

### CHM 146
**Chemistry (3)**

Continuation of CHM 145 Chemistry including thermodynamics, kinetics, equilibrium, equilibrium in aqueous solution, acids and bases, coordination chemistry and electrochemistry.

**3 Class Hours; Prerequisite: CHM 145 Chemistry, CHM 145L Chemistry Laboratory and Math B (minimum grade of 65) or MAT 136 College Algebra and Trigonometry; Corequisite: CHM 146 Chemistry Laboratory.**

### CHM 146L
**Chemistry Laboratory (1)**

Continuation of CHM 145 Laboratory with experiments designed to illustrate thermodynamics, kinetics, equilibrium, qualitative analysis, and electrochemistry.

**3 Laboratory Hours; Corequisite CHM 146 Chemistry.**

### CHM 220
**Introduction to Instrumental Analysis (2)**

An introduction to the theory and laboratory instruction in electrochemical, nuclear, optical and chromatographic methods of analytical chemistry. Laboratory techniques include potentiometry, conductimetry, coulometry, polarography, liquid scintillation counting, gamma spectrometry, ultraviolet-visible, infrared, atomic absorption spectrophotometry, gas, ion, high performance liquid chromatography, and gas chromatography, mass spectrometry. For Medical Laboratory Technology students.

**1 Class Hour, 3 Laboratory Hours; Prerequisite: CHM 146 Chemistry.**

### CHM 245
**Organic Chemistry (3)**

A fundamental treatment of organic chemistry. Organic nomenclature, chemical properties of selected functional groups, mechanisms, stereochemistry and synthetic methods. For Liberal Arts science majors and Engineering Science students with departmental approval.

**3 Class Hours; Prerequisite: CHM 146 Chemistry;**

**Corequisite: CHM 245L Organic Chemistry Laboratory.**

### CHM 245L
**Organic Chemistry Laboratory (2)**

Basic techniques of separation and purification such as recrystallization, distillation, extraction, chromatography, modern instrumental techniques. Introduction to modern organic synthesis with emphasis on microscale techniques and methods of separation and purification.

**4 Laboratory Hours; Corequisite: CHM 245 Organic Chemistry.**

### CHM 246
**Organic Chemistry (3)**

A continuation of CHM 245 Organic Chemistry including spectroscopy and introduction to molecules of biological importance.

**3 Class Hours; Prerequisite: CHM 245 Organic Chemistry; Corequisite: CHM 246L Organic Chemistry.**

### CHM 246L
**Organic Chemistry Laboratory (2)**

A continuation of CHM 245L Organic Chemistry Laboratory including an introduction to complex multistep synthesis and qualitative organic analysis by classical and modern instrumental techniques with emphasis on microscale techniques.

**4 Laboratory Hours; Prerequisites: CHM 245 Organic Chemistry and CHM 245L Organic Chemistry Laboratory; Corequisite: CHM 246 Organic Chemistry.**

### CHM 290
**Forensic Toxicology (3)**

Application of the principles of forensic toxicology and the related forensic sciences within the scope of medical-legal investigation. Drug and poison analysis, examination of physical evidence and death investigation. Laboratory sessions will provide basic knowledge of forensic analysis utilizing microscopy, gas chromatography, thin layer chromatography and spectroscopy.

**2 Class Hours, 2 Laboratory Hours; Prerequisite: CHM 120 Fundamental Chemistry or a semester of General Chemistry or permission of instructor.**

### CHM 299
**Independent Study (1-4)**

The student undertakes an independent project in his/her specialty under the guidance of a faculty member. Only one independent study course allowed per semester. Consideration may be given a project involving a work assignment.

**Prerequisite: Departmental approval.**

## CIVIL ENGINEERING TECHNOLOGY

### CIV 105
**Introductory AutoCAD (2)**

An introduction to computer aided drafting using AutoCAD. Command structure; use of menus to create, edit, and manipulate basic drawing elements; screen controls; file management, dimensioning.

**1 Class Hour, 2 Laboratory Hours.**

### CIV 113
**Engineering Drawing I w/CAD (2)**

An introductory course in the fundamentals of engineering drawing and the basics of Computer Aided Drafting (CAD). Manual drafting techniques are integrated with extensive use of AutoCAD. Topics include use of the drawing instruments, geometric construction, freehand sketching, orthographic projection, sectional and auxiliary views and proper dimensioning techniques. CAD topics include file management; command structure; creating, editing, and manipulating drawing elements; dimensioning. Students will gain an understanding of engineering drawing concepts by applying them in both manual drafting and AutoCAD assignments.

**1 Class Hour, 3 Laboratory Hours.**

### CIV 114
**Civil Drafting w/CAD (2)**

An introduction to large and intermediate scale mapping. Preparation of highway plan and profile drawings, contour maps, and design details. Introduction to establishing line direction by bearings and azimuths and the use of coordinate geometry. The laboratory exercises will require extensive use of CAD supplemented by several outdoor exercises.

**1 Class Hour, 3 Laboratory Hours; Prerequisite: CIV 113 Engineering Drawing I w/CAD and MAT 096 Elementary Algebra and Trigonometry or equivalent.**

### CIV 119
**Architectural Drawing w/CAD (2)**

Fundamentals of architectural drafting including floor plans, elevations, sections, details, schedules, plot plans, plumbing layouts, electrical layouts. Emphasis on residential drawings, instruction in the use of Architectural Desktop for the above types of drawings. Drawing assignments done both manually and using AutoCAD.

**1 Class Hour, 3 Laboratory Hours; Prerequisite: CIV 113 Engineering Drawing I w/CAD.**

### CIV 124
**Mechanics (Statics) (3)**

Study of static force systems and equilibrium. Free body diagrams, trusses, graphic statics, spatial force systems, friction, centroids, moments of inertia.

**3 Class Hours; Corequisite: MAT 130 Applied Algebra and Trigonometry.**

### CIV 136
**Construction Methods & Management (3)**

Principles of construction methods and management used in the construction industry including contracts, plans, specifications, methods, planning and scheduling, economics and safety. Field trips to various local engineering and/or architectural firms/local construction sites.

**3 Class Hours**

### CIV 159
**Architectural Drafting I w/CAD (3)**

Development of working drawings for use in residential type construction. Plot plans, floor plans, elevations, details, schedules, electrical layouts. Lecture topics include construction materials, specifications, and methods. Instruction in the use of Architectural Desktop for the above types of drawings. Drawing assignments done both manually and using AutoCAD.

**2 Class Hours, 3 Laboratory Hours; Corequisite: CIV 105 Introductory AutoCAD.**

### CIV 201
**Surveying I (4)**

This course introduces the basic concepts of plane surveying as well as measurement by global position systems. Class instruction covers the theory and application of measurement science. Laboratory exercises develop skill in the use and care of surveying equipment.

**2 Class Hours, 6 Laboratory Hours; Prerequisite: CIV114 Civil Drafting w/CAD; MAT130 Applied Algebra and Trigonometry.**

### CIV 202
**Surveying II (4)**

This course will introduce the following advanced topics in surveying: Location on the spherical earth surface by latitude and longitude or plane coordinate systems; Control surveying techniques; Use of satellite systems for geopositioning; and the geometry of curves as used in highway location and design. Laboratory exercises will vary between CAD drawings and outdoor exercises.

**3 Class Hours, 3 Laboratory Hours; Prerequisite: CIV 201 Surveying I.**

### CIV 217W
**Materials Testing (3)**

Composition, properties and testing of construction materials including portland cement concrete, aggregates, cements, admixtures, bituminous materials, ferrous metals, and structural timber. Design and proportioning of concrete mixes. Curing and inspection of concrete. Behavior of materials under load, load and deformation measurements, strain gages. Instruction in 7 concrete sampling and testing procedures required by American Concrete Institute for certification as Concrete Field Testing Technician. Writing emphasis course.

**2 Class Hours, 3 Laboratory Hours; Corequisite: CIV 219 Strength of Materials.**

### CIV 219
**Strength of Materials (4)**

Concepts of stress and strain. Behavior of materials due to axial force, shear, torsion, and moment. Stresses in beams and columns, shear and moment diagrams, deflections, determinate and indeterminate structures, composite members, combined stresses. Instruction in the use of a Structural Analysis/Design computer program.

**4 Class Hours; Prerequisite: CIV 124 Mechanics (Statics) and MAT 130 Applied Algebra and Trigonometry.**

### CIV 224
**Reinforced Concrete Design (3)**

Fundamental theory and principles for design of reinforced concrete by the strength method. Design, analysis and detailing of rectangular beams, T-beams, slabs and columns. An integrated design and detailing project.

**2 Class Hours, 3 Laboratory Hours; Prerequisite: CIV 219 Strength of Materials.**

### CIV 226
**Structural Steel Design (3)**

Fundamental theory and principles of design of simple steel structures using LRFD Method. Design, investigation and detailing of beams, columns, tension and compression members and their connections. Composite beams. Includes an integrated design and detailing project. Introduction to use of structural analysis/design computer program.

**2 Class Hours, 3 Laboratory Hours; Prerequisite: CIV 219 Strength of Materials.**

### CIV 231
**Estimating & Construction Planning (2)**

A systematic approach to estimating building project

costs. Term project - building cost estimate. Use of Microsoft Excel spreadsheet as an estimating tool.

**1 Class Hour, 3 Laboratory Hours; Prerequisite: CIV 119 Architectural Drafting w/CAD and CST 106 Computers in Technology.**

### CIV 237
**Hydraulics/Storm Water Management (3)**

The principles of hydraulics and hydrology as applied to finding engineering solutions to the problem of managing storm water runoff.

**2 Class Hours, 3 Laboratory Hours; Prerequisite: CIV124 Mechanics (Statics)**

### CIV 238
**Architectural Design & Building Materials w/CAD (3)**

Design and detailing of commercial buildings including site considerations, space requirements, layout planning, building materials, construction methods, construction details, working drawings. Emphasis on individual creativity. Semester project. Technical oral presentation. Use of AutoCAD and Architectural Desktop for drawings.

**2 Class Hours, 3 Laboratory Hours; Prerequisite: CIV 119 Architectural Drafting w/CAD.**

### CIV 240
**Soil Mechanics (3)**

Soil origin and nature, soil density, test borings, gradation, compaction, soil water, frost in soil, classification, permeability, shear strength, stress distribution, bearing capacity, piles. The laboratory covers ASTM and AASHTO specifications used in classifying and predicting behavior of soils.

**2 Class Hours, 3 Laboratory Hours; Prerequisite: CIV 219 Strength of Materials.**

### CIV 250
**MicroStation and InRoads Applications (2)**

MicroStation is an important Civil Engineering design and drafting software program. This course will develop basic skills in the use of MicroStation, the basic drafting program, as well as developing proficiency in the InRoads highway design extension.

**1 Lecture Hour, 3 Laboratory Hours; Prerequisite: CIV 201 or instructor approval.**

### CIV 299
**Independent Study (1-4)**

The student undertakes an independent project in his/her specialty under the guidance of a faculty member. Only one independent course allowed per semester. Consideration may be given to a project involving a work assignment.

**Prerequisite: Departmental approval.**

## COLLEGE

### COL 105
**Academic Planning Seminar (1)**

An orientation course for first semester Liberal Arts and Human Services Division students. Students will reflect upon their personal and academic goals, develop learning strategies to enhance their academic success, and acquire a working knowledge of campus services and procedures.

**1 Class Hour**

## COMMUNICATIONS

### COM 100
**Introduction to Mass Media (3)**

Overview of the components of American mass media, including history, structure, economics, regulation, verbal and visual imagery, and dynamics. Radio, television, newspapers, magazines, film, and the closely related advertising and public relations field are surveyed.

**3 Class Hours**

### COM 115
**Writing for the Media (3)**

An introductory study of the elements necessary for media writing. Students will be exposed to writing formats commonly used in media production. Writing formats covered may include news reporting, TV/radio advertising, drama, documentaries and sports. Students will have the opportunity to utilize their writing skills in many of the aforementioned areas.

**3 Class Hours; Prerequisite: ENG 110 Written Expression I.**

### COM 125
**Introduction to Audio Theory and Production (3)**

Students will be exposed to audio terminology and production techniques. Equipment discussed and used by students include mics, speaker, mixers, tape recording devices, and a variety of signal processing equipment. Production areas discussed will include radio production and studio production, as well as personal home and automotive systems. Both analog and digital system formats will be introduced.

**3 Class Hours**

### COM 130
**Introduction to Video Theory and Production (3)**

Introduction to the basic aspects of technical and production techniques of television. Emphasis will be placed on theory and use of television equipment, staging, lighting, television graphics, scripting, basic engineering, distribution systems and studio personnel. In addition to the student produced and directed assignments, members of the class will participate in production crews for final video projects.

**3 Class Hours**

### COM 145
**Contemporary Film Analysis (3)**

Issues pertaining to film analysis and critique: cinematography, narrative vs. non-narrative structure, symbolism, genre, realism vs. expressionism, composition, editing style. Analysis of contemporary issues through screening and discussion of film/cinema work of all historical periods.

**3 Class Hours**

### COM 150
**Public Relations (3)**

The course is designed to provide the communications major with a clear picture of the functions of the public relations industry and cite practical applications of public relations principles. Practical examples will be used with emphasis on communications technology presently used throughout the world.

**3 Class Hours Lecture**

### COM 200
**Image Theory for Film Photography and Television (3)**

Study of important theories of image production and effectiveness. Survey of several significant photographers, filmmakers, and television artists and their work. Emphasis on the formal elements of the still and moving image and their psychological and aesthetic effects.

History and development of visual image production from the pre-technological era to present, with a view toward understanding the universal nature of the need for visual and conceptual expression among all mediums. Role of technology in the creative and aesthetic process, as well as the interplay of artistic and societal goals.

**3 Class Hours; Prerequisite: ENG 110 College Writing I.**

### COM 205
**Introduction to Filmmaking (3)**

Introduction to the craft of filmmaking and motion picture production. A hands-on approach to the principles of cinematography, including formats, film stocks, lighting, and camera operation. Students will learn the production techniques involved in silent, single-system filmmaking, basic editing, screening techniques, and shooting film for video transfer and post-production. Students will be expected to complete a brief film project either individually or as a group, and must pay their own film and lab fees.

**2 Class Hours, 2 Studio Hours; Suggested Prerequisite: ART 112 Beginning Photography or equivalent.**

### COM 210
**Advanced Video Production (3)**

This course stresses the application of basic video production theory and techniques as they apply to a variety of productions such as Advertisements, News, Drama, Sports or other such events. Students will be responsible for ideas, scripting, design, production, editing and evaluation of final projects. Both studio and portable systems will be available for student use.

**2 Class Hours, 2 Studio Hours; Prerequisite: COM 130 Introduction to Video Theory and Production.**

### COM 240
**Mass Media Research (3)**

This course is designed to provide students with a foundation in media research. The course will introduce students to a variety of mass media research methods, such as library and internet research and content analysis, and will also work as a basis for future projects and presentations and presentation. It is the objective of this course to engage students in research projects, to introduce students to contemporary communication and media research practices, to prepare students to become critical interpreters of their research, to prepare students for further practice and training in communication and media research, and to explore the history and philosophy of social-scientific research in communication and media research.

**3 Class Hours.**

### COM 250/255
**Internship (3)**

Placement in a communications related job. Involves in addition to job requirements, directed reading, meetings with the intern supervisor, and written

assignments. Most Internships are not paid positions. By advisement only.

### COM 260
**TV Production Practicum** (3)

With prior course knowledge acquired, students will produce 1/2 hour format news/information shows for TV airing. Both equipment control and performance will be stressed in the lecture part of the class with application of both in the studio.

**2 Class Hours, 2 Studio Hours; Prerequisite: THR 140 or THR 266/276 and COM 130/COM 210.**

### COM 299
**Independent Study** (1-3)

An individual student project concerned with advanced work in a special area of communication. Conducted under the direction of a faculty member, independent study is concerned with material beyond the scope and depth of the ordinary course. (Requires application and approval.)

**Prerequisite: 3 semester hours of college level work in communications. By advisement only.**

## CRIMINAL JUSTICE

### CRJ 101
**Introduction to Criminal Justice** (3)

Overview of the major components of the criminal justice system: law enforcement, prosecution, trial courts and corrections. A systems approach is utilized with an emphasis on the structure, functions and independence of these and other criminal justice system components.

**3 Class Hours**

### CRJ 105
**Introduction to Corrections** (3)

Overview of the corrections components of the criminal justice system, tracing the history of corrections in the United States. Relationships and interdependencies of corrections with the court and law enforcement components of the criminal justice system and a discussion of the theoretical basis for the four major types of correctional models.

**3 Class Hours**

### CRJ 115
**Juvenile Justice System** (3)

Overview of the juvenile system, including the history, process, status and philosophy of the juvenile court. Law enforcement handling of juveniles, various theories of delinquency causation, correctional programs and alternative methods of dealing with juvenile offenders.

**3 Class Hours**

### CRJ 125
**Criminal Law** (3)

Essential elements of the various crimes under the criminal law. The concepts of culpability and criminal defenses recognized under the criminal law as they relate to murder, rape, robbery, burglary, arson, assault, drug offenses, disorderly conduct and harassment.

**3 Class Hours**

### CRJ 130
**Introduction to Security** (3)

Organization and management of the security function in industry, business, government and institutions. The protection of personnel, facilities and other assets, as well as administrative, legal and technical problems of loss prevention and control.

**3 Class Hours**

### CRJ 205
**Correctional Law** (3)

Overview of correctional law as it relates to prisons, probation, parole, capital punishment, juvenile justice, and sentencing based on leading court cases on these components of the corrections system. Emphasis is placed on the principles of law governing these decisions as they relate to New York Correctional Law.

### CRJ 212W
**Criminal Procedure and Constitutional Law** (3)

The right to counsel, search and seizure, confessions, lineups, electronic surveillance, probation and parole. Writing Emphasis Course.

**3 Class Hours; Prerequisite: ENG 110.**

### CRJ 215
**Police Administration** (3)

Fundamentals of organization, supervision and overall management of police and civilian personnel. Designed to supply a background for the students in dealing with the complexities involved in the management aspect of various police agencies.

**3 Class Hours; Prerequisite: CRJ 101 Introduction to Criminal Justice.**

### CRJ 218
**Police Community Relations** (3)

Course explores the relationship of the police to the community including the role of police in contemporary society; abuses of discretion; past, present and future trends in policing; problem identification and solving; and ethical issues facing policing in a free society.

**3 Class Hours**

### CRJ 225
**Security Administration** (3)

Administration of public and private security efforts: problems in protection program development and evaluation, functions of various levels of personnel, company/organizational relations, documents and personnel access control, detection systems, devices, and equipment, emergency and disaster planning, new directions in the field of security.

**3 Class Hours**

### CRJ 230
**Criminal Investigation** (4)

Basic principles of investigation as they relate to the collection, preservation, identification and examination of physical evidence. Techniques for locating and interviewing witnesses and interrogating suspects. (Currently being revised.)

**3 Class Hours (BCC); 3 Lab Hours (Additional tuition and fees). Prerequisite: CRJ 101 Introduction to Criminal Justice.**

### CRJ 235
**Corrections Administration** (3)

A survey of the theories and practices of penology in correctional institutions. The physical, educational, and social aspects of incarceration are studied relative to their impact on correctional clients. Principles of management relative to correctional services are explored.

### CRJ 240
**Community Corrections** (3)

An introduction to the history, philosophy, and practices of probation, parole, intensive supervision, community corrections, and other non-institutional corrections treatment settings. The philosophy of community treatment is explained and procedures and processes of supervision as they pertain to the offender are examined.

### CRJ 245
**Criminology** (3)

A study of the general field of criminology considering the general theories of crime causation and the impact crime has on society. Policy implications related to prevention, treatment of victims, and legal intervention are reviewed.

### CRJ 255
**Special Topics in Criminal Justice** (1-3)

The specific area to be covered will be based upon identified needs and interests of criminal justice students. This course also provides a forum for professional individuals in the criminal justice field with a particular expertise to share their knowledge and skills with students. Special topics have included Criminalistics, Police Community Relations, Drug Law, Current Legal Issues, and Domestic Violence.

**1-3 Class Hours; Prerequisites: CRJ 101 Introduction to Criminal Justice.**

### CRJ 260
**Organized Crime** (3)

Role of legal system in organized crime control, preventative methods, political influences; white collar crime, methods of intelligence gathering; relationships of organized crime to community social structure.

**3 Class Hours; Prerequisite: CRJ 101 Introduction to Criminal Justice or permission of chairperson.**

### CRJ 295
**Criminal Justice Internship** (3)

Designed as a field experience for students in selected settings (Public Defender, Police Agencies, etc.). Weekly seminars to augment experiences with operations, procedures and policies. Flexible scheduling hours TBA.

**Prerequisite: Third semester criminal justice student status, 2.5 GPA, and acceptance by a local criminal justice agency.**

### CRJ 299
**Independent Study** (1-3)

An individual student project concerned with advanced level work beyond the scope or breadth of regular courses. A specific area or topic is investigated under the direction of a faculty member. Must be approved by department chairperson and Dean.

**Prerequisites: CRJ 101 Introduction to Criminal Justice and 6 credits in CRJ courses.**

## COLLEGE SUCCESS SEMINAR

### CSS 106
**College Success Seminar** (3)

This course is designed to assist students in understanding the theory and application of academic strategies. Topics will include learning theory, test taking, note taking, reading text material, college writing, and other topics related to college success. This course forms a Learning Community with SOS 101. All the study strategies will be applied to the course content in SOS 101.

**Corequisite SOS 101**

## COMPUTER STUDIES

### CST 105
**Computer Applications (3)**

An introduction to computer concepts and application software using the computer as a problem solving tool. Topics include word-processing, spreadsheets, databases, e-mail, the Internet and Windows 95. Microsoft Office will be used in the laboratory to develop academic, professional, and business applications.

Credit will not be given for both CST 105 and CST 106.

**2 Class Hours, 2 Laboratory Hours.**

### CST 106
**Computers in Technology (3)**

An introductory course on the use of computers for technology students. Software packages will be used in problem solving and communications. Topics will include Word-processing, Spreadsheets, e-mail, information transfer, presentation packages, and BASIC programming. For students of technology. Credits will not be given for both CST 105 and CST 106.

**2 Class Hours, 2 Laboratory Hours.**

### CST 113
**Introduction to C++ (3)**

Introduction to the fundamentals of structured programming using C++. Topics may include input-output statements, data types, loop structures, procedures and functions. Lab assignments emphasize program development using modular design and self-documentation.

**2 Class Hours, 2 Laboratory Hours; Prerequisite: A computer course or equivalent. Corequisite: CST 117 Language Independent Design Tools.**

### CST 117
**Language Independent Design Tools (2)**

An introduction to proper design techniques for structured programming languages. This course presents several Language Independent design tools. Topics covered include: problem solving techniques, modular design, how to perform a proper trace, subroutines, and other fundamentals of software engineering.

**2 Class Hours; Corequisite: CST 113 Introduction to C++.**

### CST 119
**Computer Concepts and Applications (3)**

A foundation course for computer studies majors who have already had some exposure to computers. The lecture and lab will cover basic concepts in computer science and information science. The use of word processing, spreadsheets, databases, and presentation software will be covered through a series of self-directed projects. Lecture and lab content includes an introduction to computer architecture, data representation, networks, database systems, systems analysis, CASE tools, operating systems including an introduction to UNIX, comparison of programming languages, Internet, Web page development, computer history and ethics. Students should have completed a high school computer science course, which focused on the use of the Office suite, or CST 105/CST 106.

**2 Class Hours, 2 Laboratory Hours; Prerequisite: High School Computer course or CST 105/CST 106.**

### CST 120
**Java Programming (3)**

An introductory programming course in the JAVA language with a focus an web applets. Topics include data types, animation, program control, input/output, arrays and structures. Students will be introduced to JavaScript as an introduction to Web-based programming.

**2 Class Hours, 2 Laboratory Hours; Prerequisite: CST 113 Introduction to C++.**

### CST 123
**Visual Basic for Technology (3)**

Introduction to the fundamentals of programming in a technical environment using Microsoft's Visual Basic.NET. The course will teach students how to design and create applications using structure, event-driven, and object-oriented programming techniques. Programming concepts to be covered include data types and variables, control structures, arrays, functions, sequential files, printing, and effective GUI design. Applications will include topics relevant to engineering technology courses.

**2 Class Hours, 2 Laboratory Hours; Prerequisites: CST 106 or equivalent.**

### CST 124
**Introduction to CGI Programming (3)**

An introduction to CGI (Common Gateway Interface) Programming, used to develop server side application programs for the WWW. The basic coverage of CGI programming includes developing the relationship between HTML coding displayed by the browser and the actual CGI program running on the server. The main emphasis will be placed on developing and debugging CGI applications using C/C++. Several different methods of program input using forms will be covered, such as environment variables, hidden variables, selection menus, and passwords. Program output using interactive forms, plain text and HTML will also be covered in detail. Each student will be expected to write several CGI programs to explore some of the most common types of CGI applications.

**2 Class Hours, 2 Laboratory Hours; Prerequisite: CST 113 Introduction to C++**

### CST 127
**Introduction to C++ for Engineers (3)**

Introduction to the fundamentals of structured programming using C++. Topics may include input-output statements, data types, loop structures, decision structures and functions. Lab assignments emphasize engineering concepts as well as program development using modular design and self-documentation.

(This course cannot be used as a course substitute in any CST program)

**2 Class Hours, 2 Laboratory Hours.**

### CST 128
**Structured Programming in COBOL (4)**

Problem solving using the structured programming techniques of COBOL. An overview of the COBOL language will be presented including such topics as file handling and maintenance, interactive programming, report generation, program modularization, and tables. Lab assignments reflect common business applications.

**3 Class Hours, 2 Laboratory Hours; Prerequisite: Programming experience. Corequisite: MAT 096 Elementary Algebra and Trigonometry.**

### CST 133
**Structured Programming in C++ (3)**

Problem solving using the structured programming techniques of C++. Top down design and modular structure will be emphasized. Programming steps include program definition, coding, debugging, testing and validation, documentation, program maintenance. Topics covered include loop structures, functions, arrays, records (structs), and text files. Lab assignments will require modular structured programming techniques. An introduction to object-oriented programming is included.

**2 Class Hours, 2 Laboratory Hours; Prerequisites: MAT 096 Elementary Algebra and Trigonometry, Introduction to C++.**

### CST 140
**Computer Maintenance (3)**

This course teaches the principals of good computer maintenance including: identification of hardware components, storage organization, hardware and software troubleshooting, disaster recovery safety procedures, and maintenance plan.

**2 Class Hours, 2 Laboratory Hours.**

### CST 150
**C++ Programming with Objects (3)**

This course assumes a complete understanding, and experience with High-Level Language programming concepts. The course quickly takes the student through necessary C++ syntax, on to more advanced topics. Topics covered will include: C++ overview, variables, constants, program control, I/O, functions, preprocessors, arrays, structures, pointers, classes, and object-oriented programming.

**3 Class Hours, 2 Laboratory Hours; Prerequisite: CST 133 Structured Programming in C++.**

### CST 158
**Spreadsheets With Financial Applications (3)**

A comprehensive course in spreadsheet development and design with a focus on financial applications using Excel. Advanced topics include object linking and embedding, goal seeking, look up tables, data tables, multiple worksheets, managing scenarios, rational databases web application and application development with Macros and Visual Basic. Financial applications include basic financial statements, loan payments, cash flow analysis, capital budgeting, break-even analysis, and inventory management.

**2 Class Hours, 2 Laboratory Hours; Prerequisite: MAT 096 Elementary Algebra and Trigonometry, and introduction to computing course.**

### CST 170
**Digital Logic (3)**

Comprehensive coverage of basic gates, Boolean algebra, Karnaugh mapping and Quine McCluskey technique for circuit simplification. Adders, subtractors, multiplexers, code converters, asynchronous and synchronous counters presented in detail as basic computer building blocks. Analog-digital and digital-analog interfacing. Lab exercises utilize TTL and CMOS chips.

**2 Class Hours, 2 Laboratory Hours; Prerequisite or Corequisite: CST 133 Structured Programming in C and CST 117 Language Independent Design Tools.**

### CST 200W
**Systems Analysis and Design (3)**

A first course dealing with the principles of systems analysis and problem solving, concentrating on investigation and analysis of systems and their resulting design. Emphasis on the importance of standards, procedures, documentation and design tools with a focus on object-oriented systems development. A variety of group and individual lab assignments will include analysis and design tools, prototyping and CASE. Both traditional and object-oriented techniques will be used. Writing emphasis course.

**2 Class Hours, 2 Laboratory Hours; Prerequisite: CST 128 Structured Programming in COBOL or CST 119 Computer Concepts and Application and CST 133 Structured Programming in C++.**

### CST 202W
**Data Structures with C++ (3)**

This course assumes a complete understanding and experience with the C++ programming language. The course gives the student the necessary design philosophies, fundamental syntax, and experience with, advanced programming concepts. Topics covered include: static and dynamic data structures, arrays, structures, files, linked lists, stacks, queues, trees, and recursion. Structured, modular programming, and extensive documentation is required. Writing Emphasis Course.

**2 Class Hours, 2 Laboratory Hours; Prerequisite: CST 150 C++ Programming with Objects with a minimum grade of "C" or better.**

### CST 208
**Introduction to Networking (3)**

This course is designed to teach the fundamentals of computer networking including network design, implementation, support, and management. Students will investigate hardware, software and wiring as they relate to networking a Local Area Network (LAN) and a Wide Area Network (WAN). Various network protocols and operating systems designed for networking will be investigated. Topics will also include networking topology and security.

**3 Class Hours; Prerequisite: CST 119 Computer Concepts and Applications.**

### CST 209
**Advanced Networking (3)**

This course provides an in depth exploration of currently evolving and new computer networking, data communication and telecommunication technologies. Lectures, demonstrations, interactive learning, and site visits will be employed. Extensive laboratory work matches the lecture topics.

**2 Class Hours, 2 Laboratory Hours; Prerequisite: CST 208 Introduction to Networking, CST 113 Introduction to C++.**

### CST 213
**Database Systems (3)**

A comprehensive course in database management with a focus on the effective use of database systems, database design, and application development with Access and Visual Basic. Topics will include database concepts and architecture for both micro and mainframe computers, creating tables, queries, forms and reports, object linking and embedding, SQL, macros, Visual Basic programming, integrity constraints, concurrency control, and transaction processing.

**2 Class Hours, 2 Laboratory Hours; Prerequisite: CST 119 and an introduction to programming course.**

### CST 216
**Visual Basic.NET (3)**

This course teaches the fundamentals of the Visual Basic language. The first part of the course concentrates on a detailed discussion of various Visual Basic controls, programming options and the use of Visual Basic tools. Once these concepts are mastered, the emphasis shifts toward integrating the various components into complete working applications. Emphasis will be placed on visual interfaces as well as problem solving.

**2 Class Hours, 2 Laboratory Hours; Prerequisite: CST 128 Structured Programming in COBOL or CST 133 Structured Programming in C.**

### CST 219
**Socket Programming (3)**

An introduction to network sockets programming, used to develop server and client application programs for the Internet. The basic coverage of socket programming will include an overview of TCP/IP, network addressing, well known services, sockets and ports. The main emphasis will be placed on developing and debugging socket applications using C/C++. Each student will be expected to write several socket application programs.

**2 Class Hours, 2 Laboratory Hours; Prerequisites: CST 113 Introduction to Programming Using C++ and CST 208 Introduction to Networking.**

### CST 220
**Microprocessors and Assembly Language Programming (3)**

This course includes an introduction to the 32-bit Intel architecture with programming techniques utilizing the Intel microprocessor and coprocessor family. Concepts include: programming modes, branching, flags, stacks, procedures, macros, interrupts, arithmetic and logic operations, multiple precision arithmetic and string operations. Extensive laboratory work is done on small systems.

**2 Class Hours, 2 Laboratory Hours; Prerequisite: One structured programming language; Co- or Prerequisite: CST 170 Digital Logic.**

### CST 222
**C# Essentials (3)**

A fast paced introduction to the object-oriented C# programming. Course provides coverage of C# terms and definitions in addition to historical links to the C and C++ languages. This course is a continuation of CST 150 and provides additional programming detail in object-oriented programming techniques. Extensive laboratory assignments and projects are used in this course.

**2 Class Hours, 2 Laboratory Hours; Prerequisite: CST 133 Structured Programming in C++.**

### CST 225W
**Introduction to Small Systems (3)**

Introduction to the concepts and implementation of small computer systems. Topics include hardware and software interfacing techniques, processors, memory, busses, keyboards, display terminals, printers, graphics magnetic storage, disk drives, disk operating systems, telecommunications techniques, and networking. Extensive use of a small system in the laboratory will reinforce classroom concepts. Writing Emphasis Course.

**2 Class Hours, 2 Laboratory Hours; Prerequisite: CST 220 Microprocessors and Assembly Language Programming, CST 170 Digital Logic and CST 133 Introduction to C++.**

### CST 226
**Advanced Visual Basic.NET (3)**

This course will help students develop advanced Visual Basic.NET programming skills including topics such as object-oriented design and programming, exception handling techniques, file-processing techniques, use of graphics and multimedia, connecting to database systems, retrieval and manipulation of database data through VB.NET, and an introduction to the use of Web forms, Web controls and dynamic Web content.

**2 Class Hours, 2 Laboratory Hours; Prerequisite: CST 216 Visual Basic for Programmers.**

### CST 228
**GDI Programming with C/C++ (3)**

This course is a natural extension of CST 150, C/C++ Programming for Programmers. The course teaches Graphics Device Interfacing (GDI) with Windows 98 and Windows NT Programming Concepts. Topics include programming advantages of a GDI environment, concepts and techniques. Icons, cursors, bitmaps, fonts, menus, dialog boxes, etc. are integrated into the GDI environment. Extensive programming and laboratory work matches the lecture topics. Writing emphasis course.

**2 Class Hours, 2 Laboratory Hours; Prerequisites: CST 150 CC++ Programming with Objects.**

### CST 297
**Cooperative Work Experience (1-3)**

Cooperative education in computing may be available. On-the-job experience may be obtained by working with business, industries, and offices whose operations require the use of computers. To be eligible a student must maintain a cumulative grade point average of 2.5 with a 3.0 average in CST courses and have no "F" grades.

### CST 299
**Independent Study (1-3)**

The student undertakes an independent project, under the guidance of a faculty member, which is beyond the scope of courses currently offered by the department. Only one independent study project allowed per semester.

## COMMUNITY INTERNSHIP

### CTP 270
**Seminar and Practicum in Peer Education (3)**

The approach of this seminar will be both theoretical and experiential. Students will focus on educational institutions and issues from a sociological and a political point of view as well as basic methods of teaching and tutoring through reading, class discussion, and informal and formal writing assignments. Class participants evaluate theories and concepts through at least 48-52 contact hours of internship with students in one of the many practical teaching situations available on campus or in the community. Recommended for those interested in careers in education.

### CTP 275
**Community Internship (1-3)**

For qualified students who seek an internship experience in order to explore or validate a career choice, or to render volunteer service to the community. Placements are available in non-profit, govt. or social service agencies as well as in public education and local hospitals.

**1 Class Hour; 6-9 hours per week; Prerequisite: 24 credit hours, application, interview, good academic standing. Satisfies the Civic Education requirement.**

## DENTAL HYGIENE

### DEN 101
**Dental Hygiene I** **(4.5)**

Introduction to skills utilized in the contemporary practice of dental hygiene, including infection control, ergonomics, patient assessment and treatment. Theory is applied in preclinic setting on student patients.

**2 Class Hours; 8 Clinic Hours; Corequisite: DEN 108 Infection Control in Dentistry.**

### DEN 102
**Dental Hygiene II** **(5.5)**

Continuation of DEN 101 Dental Hygiene I. Theory in dental hygiene process of care including assessment, planning, implementation and evaluation of patient care. Includes patients with special needs, tobacco cessation intervention, emergency medical and dental procedures and oral physiotherapy and oral health instruction. The clinical experience emphasizes patient assessment, treatment planning, instrumentation and oral health instruction.

**3 Class Hours, 8 Clinic Hours; Prerequisites: DEN 101 Dental Hygiene I, DEN 103 Oral Anatomy and Physiology and DEN 108 Infection Control in Dentistry; BIO 131 Human Biology I or permission of the Department.**

### DEN 103
**Oral Anatomy and Physiology** **(3)**

Normal structure and function of the oral cavity (microscopic and gross). Laboratory work provides experience with microscopic and macroscopic study of structures in the oral cavity, head and neck.

**2 Class Hours, 3 Laboratory Hours.**

### DEN 106
**Clinical Dental Radiography** **(2)**

Radiation physics and biology; understanding of radiation health, safety and protection; radiographic quality, intraoral dental radiographic techniques, film processing and mounting, interpretation of radiographic errors and recognition of anatomical landmarks. Theory is applied in the laboratory setting on radiographic dexters and adult patients.

**1 Class Hour, 2 Lab Hours; Corequisite: DEN 102 Dental Hygiene II.**

### DEN 107
**Introduction to Periodontology** **(1)**

Clinical and histological evaluation of pathogenesis of gingivitis and periodontitis including: construct of the periodontium, study of inflammatory and immune responses, and microbiology of plaque.

**1 Class Hour; Corequisite: DEN 102 Dental Hygiene II.**

### DEN 108
**Infection Control in Dentistry** **(1)**

Theory in infection control in the dental hygiene practice, including responsibility for infection control practices, transmission of disease and methods for preventing disease transmission for the hygienist and patient.

**1 Class Hour; Corequisite: DEN 101 Dental Hygiene I.**

### DEN 109
**Ethical/Legal Considerations** **(1)**

Ethics and ethical issues; jurisprudence and legal considerations including risk management in dentistry and dental hygiene.

**1 Class Hour.**

### DEN 110
**Dental Materials** **(2)**

Composition, chemical and physical properties and use of materials in dental laboratory and operatory. Laboratory sessions will provide experience in performing common dental laboratory procedures including their clinical application of expanded functions.

**1 Class Hour, 3 Laboratory Hours; Corequisite: DEN 102 Dental Hygiene II.**

### DEN 201
**Dental Hygiene III** **(6)**

Continuation of DEN 102 Dental Hygiene II. Integration of theory with clinical experience in various oral hygiene preventive and therapeutic procedures. Emphasis on planning and execution of the total patient treatment.

**2 Class Hours, 12 Clinic Hours; Prerequisites: DEN 102 Dental Hygiene II, DEN 106 Clinical Dental Radiography, DEN 107 Introduction to Periodontology, DEN 110 Dental Materials, BIO 131 Human Biology I and BIO 132 Human Biology II and BIO 150 Microbiology; or MLT 208/209 Pathogenic Microbiology.**

### DEN 202
**Dental Hygiene IV** **(6)**

Continuation of DEN 201 Dental Hygiene III. Comprehensive clinical experience in all phases of dental hygiene practice. Students are prepared for entry-level Dental Hygiene practice.

**2 Class Hours, 12 Clinic Hours; Prerequisites: DEN 201 Dental Hygiene III, DEN 204 General and Oral Pathology, DEN 205 Periodontology, DEN 206 Dental Pharmacology and DEN 209 Nutrition**

### DEN 204
**General and Oral Pathology** **(3)**

Broad picture of the disease process through the study of common general diseases, their cause, results and treatment. Emphasis on the principles of inflammation, healing and repair, oral disease, their causes, recognition and treatment.

**3 Class Hours; Corequisite: DEN 201 Dental Hygiene III.**

### DEN 205
**Periodontology** **(2)**

Overall study of the pathology of the supporting structures surrounding the teeth. Special emphasis on recognition and treatment of the periodontal patient within the scope of the dental hygienist.

**2 Class Hours; Corequisite: DEN 201 Dental Hygiene III.**

### DEN 206
**Dental Pharmacology** **(2)**

Pharmacology as it affects the clinical practice of dental hygiene and dentistry. Drugs commonly used in dentistry and correct methods for their use. Emphasis on pharmacological aspects of anesthesia.

**2 Class Hours; Co-requisite: DEN 201 Dental Hygiene III.**

### DEN 209
**Dental Nutrition** **(3)**

Basic nutrition principles, including metabolism, functions, sources, and conditions resulting from excessive or inadequate intake of each nutrient. Study of diet planning, dietary guidelines, weight control, and current nutrition topics and controversies. Special emphasis on the relation of nutrition to the oral cavity, interviewing, nutritional counseling, computer aided dietary analysis, and its practice in the dental office.

**3 Class Hours; Corequisite: DEN 201 Dental Hygiene III.**

### DEN 213
**Public Health** **(3)**

Principles of public health and fundamentals of assessing, planning, implementing and evaluation of public health care with emphasis on community dental health. Laboratory experience emphasizes reading scientific literature, statistics, community health education, and community health agencies.

**2 Class Hours, 2 Laboratory Hours; Corequisite: DEN 202 Dental Hygiene IV.**

### DEN 214
**Current Topics In Dental Hygiene** **(3)**

Topics relevant to contemporary practice of dental hygiene including identification and reporting of child abuse and the hygienist's role in the care of special patients. Emphasis is on case-based learning.

**3 Class Hours; Corequisite: DEN 202 Dental Hygiene IV.**

### DEN 298/299
**Independent Study — Fall/Spring** **(1-3)**

Advanced studies in Dental Hygiene conducted under the guidance of a Dental Hygiene instructor.

**Prerequisites: DEN 101, 102 Dental Hygiene I and II and permission of Department Chairperson.**

## DIETARY MANAGER

### DIA 101
**Nutrition** **(3)**

The functions and sources of nutrients. Digestion, absorption and utilization of food as well as nutrient needs across the life-cycle. Various foods, preferences and customs, as well as dietary guidelines and symptoms of nutrition deficiency and excess will be discussed. Topics relating to therapeutic nutrition; dietary policies and procedures; dietary laws; food, labor and health regulations will also be covered.

**3 Class Hours**

### DIA 103
**Dietary Management Field Experience I** **(3)**

125 hours of reality-oriented learning activities scheduled to coordinate with classroom experience, outside the college classroom. The experience must be in a health care setting which provides activities in the curriculum content area. The on-site preceptor must be a registered dietitian with no less than two years full time equivalent post-registration practitioner competency. Students are responsible to find willing preceptors and appropriate employment.

**Prerequisites or Co-requisites: DIA 101 Nutrition, BHM 110 Sanitation and Safety, BHM 216 Quantity Food Production, BHM 235 Hotel/Restaurant Cost Control.**

### DIA 204
**Dietary Management Field Experience II (3)**

125 hours of reality-oriented learning activities scheduled to coordinate with classroom experience, outside the college classroom. The experience must be in a health care setting which provides activities in the curriculum content area. The on-site preceptor must be a registered dietitian with no less than two years full time equivalent post-registration practitioner competency. Students are responsible to find willing preceptors and appropriate employment.

**Prerequisites or Co-requisites: DIA 101 Nutrition, DIA 103 Dietary Management Field Experience I, BHM 110 Sanitation and Safety, BHM 216 Quantity Food Production, BHM 235 Hotel/Restaurant Cost Control, BUS 248 Human Resource Management.**

## DIRECT MARKETING

### DMR 210
**Data Base Information Management for Marketing (3)**

This course emphasizes three levels of Electronic Data Base Management: Targeting and profiling techniques; segmentation strategies; and data and list sources/issues. Various aspects of data merge-match problems and solutions are examined, as well as development of yardsticks for measurement and testing resulting materials.

**3 Hours Lecture per week; 3 Semester Credits; Prerequisite: BUS 238 Marketing Research.**

### DMR 220
**Direct Marketing (3)**

This course is a specialty within the field of theoretical marketing, and focuses on those components unique to Direct Marketing: Channels of Distribution and Promotion, and the Development of Databases, as a means of product and service delivery to specifically identified customers. The course concentrates on the interactive system of direct marketing that uses one or more advertising media to effect a measurable response at a specified location. It incorporates those aspects of Direct Marketing related to successfully identifying both Final and Organizational Consumer needs, as well as the direct mode of delivery and promotion to accomplish established goals.

**3 Hours Lecture per week; 3 Semester Credits; Prerequisite: BUS 141 Marketing or permission of the instructor.**

### DMR 295
**Qualitative Marketing Research Methodologies (3)**

This course integrates the social sciences and business in a mutual focus toward an interpretive, qualitative, approach to conducting research. Qualitative methodologies in research models utilize structured and unstructured interviewing, such as brainstorming, nominal group techniques, focus groups, as well as survey design and other textual analysis and ethnography. This qualitative approach to solving business problems will combine the social sciences and humanities in the generation and interpretation of data linking business research to social and economic change. This will help students more fully understand the technological revolution and the relationship of the business researcher to research beyond the statistical models most commonly used.

**3 Hours Lecture per week; 3 Semester Credits; Prerequisite: BUS 238 Marketing Research.**

## EARLY CHILDHOOD

### ECE 101
**Introduction to Family Day Care (1)**

Introduction of principles of regulated family day care including preparing the home as a learning setting, activity planning and guidance of mixed age groups, small business management and parent/provider relationships.

**3 Class Hours - 5 Weeks**

### ECE 102
**Introduction to Working in School Age Child Care (1)**

Developmental characteristics of 5-12 year olds, programming for that age in extra-school settings, preparing the environment for safety and learning, and appropriate guidance of school age children in groups.

**3 Class Hours - 5 Weeks**

### ECE 103
**Introduction to Children With Special Needs (1)**

Overview of recognizing, understanding and helping children with special needs to be included in early childhood programs as well as dealing with parents and referral agencies.

**3 Class Hours - 5 Weeks**

### ECE 110
**Introduction to Early Education (3)**

Introduction to preschool and primary education. An overview of career options in professional education, child development, learning theories with a historical perspective, parent involvement, and contemporary issues in education including diversity. Classroom observations required. Required for Early Childhood majors and transfers.

**3 Class Hours**

### ECE 120
**Curriculum Development (3)**

Methods and materials for planning developmentally appropriate curriculum for young children, including art, music, creative movement, language, mathematics, science, nutrition, manipulative play, dramatics and early literacy. Practice activities in local early childhood settings.

**3 Class Hours; Prerequisite: ECE 110 Introduction to Early Education.**

### ECE 145
**Children and the Arts (3)**

Creative arts process in art, drama, literature, music and movement for students preparing to work with young children. Students will learn to integrate the arts into planned curriculum by providing creative experiences for children.

**3 Class Hours**

### ECE 155
**Literacy and Language in Early Childhood (3)**

Developmental stages of literacy and language with an emphasis on planning appropriate curriculum to promote language and literacy in early childhood classrooms, evaluation of diversity in children's literature, and English as a second language.

**3 Class Hours**

### ECE 175
**Techniques of Observation and Evaluation (3)**

Develops skills and methods of observing young children in structured and unstructured situations. Covers ethics, interpretations of children's behavior in light of development. Implications of evaluations. Required of Early Childhood Majors.

**3 Class Hours**

### ECE 180
**Child Health and Safety and Nutrition (3)**

Designed to help students become aware of techniques for promoting general health care and safety standards at children's centers.

**3 Class Hours**

### ECE 185
**Child Guidance – Infants and Toddlers (1)**

Moral and social development as the basis for establishing and maintaining cooperative behaviors in infants and toddlers for persons caring for them in groups. Non-punitive, internal control strategies will be presented.

**3 Class Hours - 5 Weeks**

### ECE 186
**Guidance – Preschoolers (1)**

Moral and social development as the basis for establishing and maintaining cooperative behavior in preschoolers for persons caring for them in groups. Non-punitive, internal control, problem-solving strategies will be presented.

**3 Class Hours - 5 Weeks**

### ECE 187
**Child Guidance – Primary Age Children (1)**

Moral and social development as the basis for establishing and maintaining cooperative behaviors in school age children K - grade 3 for persons caring for them in groups. Non-punitive, internal control strategies will be presented.

**3 Class Hours - 5 Weeks**

### ECE 190
**Infants, Toddlers and the Family (3)**

Developmental milestones of children under 3 years old are the basis for planning individualized activities and preparing quality environments, appropriate practices in centers and homes are examined with emphasis on sharing the caring relationships between parents and providers.

**3 Class Hours**

### ECE 200W
**Field Experience I (4)**

Group seminar meets weekly to guide the student in the role of the teacher in the early childhood setting. Site placements are assigned for practical experience under supervision, working with young children for 12 weeks, total 96 hours. Novice, experienced and employed students are observed by college supervisor.

**Prerequisite: 30 hours of counseled coursework including ECE 120.**

### ECE 201
**Field Experience II (4)**

Group seminar meets weekly to further develop professional practice. Site placements are assigned for practical experience under supervision, working with young children for 12 weeks, total 96 hours. Novice, experienced and employed students are observed by college supervisor.

**Prerequisite: 30 hours of counseled coursework including ECE 120.**

### ECE 210
**Children With Special Needs (3)**

Identification and implications of state mandates for children with special needs. Explores the principles and practices of facilitating the learning of special needs children in group settings and parents role in educational plan.

**3 Class Hours**

### ECE 224
**Pre-School Mathematics (1)**

Methods and materials used to present age-appropriate arithmetic and counting skills to pre-school children.

**3 Class Hours - 5 Weeks**

### ECE 226
**Pre-School Science (1)**

Methods and materials used to present age appropriate science concepts to pre-school children.

**3 Class Hours - 5 Weeks**

### ECE 227
**Early Childhood and Technology (1)**

Content and methods for teaching with computers and related technologies, evaluation of children's software, technology for communication and record keeping in early childhood on programs. Issues related to young children and technology.

**3 Class Hours - 5 Weeks**

### ECE 230
**Working With Families in Early Childhood Programs (3)**

Designed to introduce importance of family involvement in the education of the young child. Benefits for teachers and parents and child when working together. Various aspects of working with families, such as home visiting, group meetings, newsletters and written communications, family conferences and the use of volunteers in the classroom.

**3 Class Hours**

### ECE 245
**Social Development of Young Children (3)**

Explores the developmental, environmental and temperamental aspects of the socialization process. Topics include aggression, cooperation and sharing, moral development, peer interaction, sex-role development, communication in the classroom.

**3 Class Hours**

### ECE 255
**Special Topics in ECE (1-3)**

Specific topics are based on need of ECE students and/or community. Provides a forum for EC professionals to share their unique knowledge and skills with students. Recent topics have included: Multi-cultured perspectives, community resources, Math for Young Children, pre-reading, and Discipline Techniques.

**1-3 Class Hours; Prerequisite: ECE 110 or permission of the department.**

### ECE 299
**Independent Study in Early Childhood (1-3)**

An individual student project in early childhood beyond the scope of requirements offered by the department. Under the direction of a faculty member and approved by the program coordinator and department chairperson and Dean. No more than three credits may be acquired toward the Early Childhood degree in independent study projects.

**1-3 Class Hours; Prerequisite: 6 Semester hours in Early Childhood courses.**

## ECONOMICS

### ECO 110
**Micro-Economics (3)**

An introduction to key economic concepts which relate to the market mechanism, supply and demand, the allocation of scarce resources, consumer behavior and the behavior of firms. We all live in a world where choices are made and those choices always involve economic costs and consequences.

**Prerequisite: ENG 110 (this is always a "W" course); 3 Class Hours; satisfies the Civic Education requirements.**

### ECO 111
**Introduction to Macro-Economics (3)**

Causes of unemployment and inflation and the government's efforts to control them. Problems of economic growth as they relate to our economy and the other countries, developed and underdeveloped. International trade and finance problems.

**3 Class Hours**

### ECO 299
**Independent Study - Economics (1-3)**

An individual student project in economics which is beyond the scope or requirements of the courses offered by the department, conducted under the direction of a faculty member and approved by the department chairperson.

**Prerequisite: 3 Semester Hours in Economics.**

### EDU 111
**Foundations of American Education (3)**

An introduction to the profession of teaching through the social, economic, and political history of American education. Examines contemporary goals, practices, and issues. A 20 hour supervised field experience is required. Appropriate for teacher education transfer students in Childhood, Middle Children and Adolescent. See page 87 on teacher certification.

## ELECTRICAL

### EET 110
**Introduction to Electricity (4)**

Basic electrical circuit elements including voltage sources, light bulbs, resistors, heater elements. Simple series, parallel, and series-parallel resistive circuits. Introduction to complex circuit analysis. Use of basic meters to measure voltage, current, and resistance. An introduction to the oscilloscope. Reading charts and tables. Use of laboratory equipment to measure current, voltage, and resistance in a multiple load circuit with emphasis on proper data recording. Related computer activities are included.

**4 Class Hours**

### EET 111
**Electrical Construction Laboratory I (2)**

Basic knowledge about today's electrical equipment. Experience in the installation, fabrication and maintenance of electrical equipment by means of "hands on" approach. Shop safety and the National Electrical Code. Basic residential and commercial wiring procedures, basic measuring techniques, fundamentals of basic machine operations.

**1 Class Hour, 3 Laboratory Hours.**

### EET 112
**Electrical Construction Laboratory II (1)**

Advanced studies of the *National Electrical Code* in the areas of electrical safety affecting products, installation procedures, and use of electrical equipment. An emphasis on Special-Purpose Outlets, Conduit, Heating Systems, Illumination, Low-Voltage Remote-Control, PCB Fabrication (prototype), PCB Layout Software, Troubleshooting-Fractional Horsepower Electric Motors, and Surface Mount Technology (SMT) will be some of the topics to be covered.

**3 Laboratory Hours; Prerequisite: EET 111 Electrical Construction Laboratory I.**

### EET 115
**Introduction to Digital Logic (3)**

An introduction to computer digital logic including number systems, binary arithmetic, logic gates, flip flops, counters, memories, and basic computer architecture. Includes the use of digital circuit simulation software.

**3 Class Hours**

### EET 125
**DC Circuits and Laboratory (3)**

Fundamentals of DC electrical circuits and application of circuit laws, theorems and measuring techniques. Includes loop and nodal analysis, superposition, Thevenin's and Norton's theorems, and RC time constants. The laboratory provides hands on experience setting up and trouble shooting DC circuits and provides familiarity with digital multimeters and other relevant instruments.

**2 Class Hours, 2 Laboratory Hours; Prerequisite or Corequisite: MAT 130 Applied Algebra and Trigonometry.**

### EET 126
**AC Circuits and Laboratory (3)**

A continuation of the study of circuits concepts as related to single- and three-phase alternating current. Resonance, network analysis, power.

**2 Class Hours, 2 Laboratory Hours; Prerequisite: MAT 130 Applied Algebra and Trigonometry, EET 125 DC Circuits and Laboratory.**

### EET 150W
**Electronic Devices & Laboratory (3, 1)**

A first course in Electronics introducing semi-conductor physics and the active devices fundamental to the field. Introduction to diodes, bipolar and field effect transistors, thyristors, optoelectronic devices, operational amplifiers, and microprocessors. Design and analysis of representative circuits based on these building blocks using traditional and computer based methods.

**3 Class Hours, 3 Laboratory Hours; Prerequisites: MAT 130 Applied Algebra and Trigonometry and CST 106 Computer Applications; Corequisite: EET 126 AC Circuits and Laboratory.**

### EET 183
**Applied Electricity (3)**

Practical applications of electrical circuits and machines. Topics include AC and DC circuits, machines and controllers, and single- and three-phase circuits and transformers. Laboratory work includes demonstration of basic electrical concepts using measuring instruments such as digital multimeters, oscilloscopes, function generators, counters, wattmeters and bridges, along with a lab that includes motors and generators.

**2 Class Hours, 3 Laboratory Hours; Prerequisite or Corequisite: MAT 130 Applied Algebra and Trigonometry.**

### EET 201/202
**Senior Seminar (0, 0)**

A weekly lecture series intended to make the student aware of the changing elements of the Electrical, Electronic and Computer industry and help the stu-

dent focus on areas of concern presented by industry experts. Where appropriate, emphasis will be placed on the responsibility by technologists to society as a whole in the area of ethical and moral values. Topics may include Quality Assurance, Ethics in Engineering, Artificial Intelligence, Telecommunications, Robotics, Power Engineering, Modeling and Simulation, CIM, Interpersonal Communications, Statistics.

**1 Class Hour; Prerequisites: ENG 110 Written Expression and at least one of the following: EET 267 Microprocessors or EET 270 Control Systems. Corequisite: EET 252 Electronic Systems.**

### EET 210
**Applied Electricity and Electronics (4)**

Practical applications of electrical circuits and machines. Topics include a/c and d/c circuits, simple motors and single- and three-phase circuits and transformers. Practical applications of electronic concepts will include the amplifier, oscillator, and basic logic devices. Laboratory work includes demonstration of basic electrical concepts using measuring instruments such as digital multimeters, oscilloscopes, function generators, counters, wattmeters, and bridges.

**3 Class Hours, 3 Laboratory Hours; Prerequisites: MAT 130 Applied Algebra and Trigonometry or equivalent and PHY 161 Physics I or equivalent.**

### EET 230
**Electronic Design and Fabrication (1)**

Selection, package design and construction of an electronic project and preparation of related drawings using computer aided design in a team environment. Use of various manufacturing processes to fabricate the project. Use of industrial standard drafting practices to properly describe the operations. Chassis layout, printed circuit board design, exposure, machining, wiring, soldering and enclosure fabrication are required.

**3 Laboratory Hours; Prerequisites: EET 112 Electrical Construction Laboratory II and CIV 113 Engineering Drawing with CAD and EET 150W Electronic Devices & Laboratory.**

### EET 245
**Power Systems and Laboratory (3, 1)**

DC and AC electrical machines theory, applications, and control. Single-phase and polyphase power transformers and rectifiers. Application of industrial control systems, including power generation, transmission, distribution, and programmable controllers (PLCS).

**3 Class Hours, 3 Laboratory Hours; Prerequisite: EET 126 AC Circuits and Laboratory.**

### EET 247W
**Energy Conversions & Laboratory (3, 1)**

Theory, operation, and application of DC and AC motors, generators and their control. Theory and application of single and polyphase transformers, power generation systems, and power transmission. Programmable controller applications.

**3 Class Hours, 3 Laboratory Hours; Prerequisite: EET 150W Electronic Devices & Laboratory.**

### EET 251
**Electronic Circuitry and Laboratory (3, 1)**

A second course in Electronics that incorporates the devices introduced in EET 150W Electronic Devices into representative circuits of moderate complexity. These include multi-stage amplifiers, instrument and transducer amplifiers, op-amp active filters and other related data acquisition circuits. Practical considerations include heat sinking, noise, frequency effects and appropriate device selection. Computer simulation and design software are used to design, analyze, and perform frequency response analyses of multistage amplifiers and active filter circuits.

**3 Class Hours, 3 Laboratory Hours; Prerequisite: EET 150W Electronic Devices and Laboratory.**

### EET 252
**Electronic Systems & Laboratory (3, 1)**

A third course in Electronics that uses the circuit concepts used in EET 251 Electronic Circuitry to develop larger systems currently used in the electronics and communications fields. These include interface and data acquisition systems, switchmode power supplies, telecommunications, phase locked loops, satellite and television and communication systems, large signal amplifiers, sinusoidal oscillators and multivibrators. The computer is used to aid in design and debug of systems.

**3 Class Hours, 3 Laboratory Hours; Prerequisite: EET 251 Electronic Circuitry & Laboratory.**

### EET 260
**Digital Electronics (3)**

Study of number systems, logic gates and families (TTL/CMOS), logic design and simplification techniques, digital black box design, Karnaugh maps, standard circuits such as counters, shift registers, and decoders, Boolean algebra, programmable logic, analog to digital interfacing, computer arithmetic, digital data transmission, memories, and synchronous logic.

Appropriate laboratory exercises provide hands-on experience building and troubleshooting many types of digital circuits. Electronic circuit simulation software is used extensively.

**2 Class Hours, 2 Laboratory Hours; Prerequisite: EET 150W Electronic Devices and Laboratory.**

### EET 267
**Microprocessors (3)**

Study of microprocessor and microcontroller hardware and software. Microprocessor (Intel and Motorola 8/16/32/64-bit machines) assembly language programming using assemblers, DEBUG, disassemblers, monitors, and loaders will be applied to industrial applications of microprocessors and microcontrollers. Computer architecture and system design methods for microprocessor-based systems are also covered.

Appropriate laboratory exercises provide hands-on experience in two areas: microprocessor and microcontroller assembly language, and system interface hardware.

**2 Class Hours, 2 Laboratory Hours; Prerequisite: EET 260 Digital Electronics.**

### EET 270
**Control Systems & Laboratory (3, 1)**

Theory, operation, design and implementation of open and closed loop control systems, including mathematical modeling and stability prediction. Theory and applications of both analog and digital control system input/output. Introduction to robotics and process control techniques.

**3 Class Hours, 3 Laboratory Hours; Prerequisites: EET 247W Energy Conversions & Laboratory and EET 260 Digital Electronics.**

### EET 280
**Communications Systems & Laboratory (3, 1)**

A third course in electronics that emphasizes the building blocks and operational theory of modern communications systems, including AM/FM/Digital radio, broadcast television, satellite and network communication technologies, encoding and modulation methods, analog versus digital communication, and signal theory. Laboratory assignments complement lecture material.

**3 Class Hours, 3 Laboratory Hours; Prerequisites: EET 251 Electronics Circuitry and Lab.**

### EET 297
**Cooperative Work Experience (1-3)**

Cooperative education in Electrical Engineering Technology and Electrical Technology may be available. On-the-job experience may be obtained by working with business, industries, and offices whose operations require the use of electrical engineering technology, electrical technology or related skills. To be eligible a student must maintain a cumulative grade point average of 2.5 with a 3.0 average in EET/ET courses and have no "F" grades.

### EET 299
**Independent Study (1-4)**

The student undertakes an independent project in his/her specialty under the guidance of a faculty member. Only one independent study course allowed per semester. Consideration may be given a project involving a job-related assignment. Any independent study project is based on instructor availability.

**Prerequisite: Department chairperson approval.**

## ENGINEERING SCIENCE

### EGR 100
**Engineering Orientation: Student Success I (.5)**

This course is designed to enhance student success by addressing five primary themes: community building, professional development, academic success strategies, personal development, and orientation to the college environment. This is an interactive course with emphasis on group problem solving and experiential learning. Common examinations, field trips, and oral presentations are included as components of this course.

**2 Lab Hours**

### EGR 101
**Engineering Orientation: Student Success II (.5)**

A continuation of EGR 100: This course is designed to enhance student success by addressing five primary themes: community building, professional development, academic success strategies, personal development, and orientation to the college environment. This is an interactive course with emphasis on group problem solving and experiential learning. Common examinations, field trips, and oral presentations are included as components of this course.

**2 Lab Hours**

### EGR 150
**Engineering Design I with Graphics (2)**

Engineers must be able to communicate their design ideas to others. Thus, this first course in Engineering Design focuses on the improvement of communication skills. These include written, oral presentation, sketching, and computer application skills. Software programs used include Microsoft Word, Excel, and PowerPoint as well as Mathcad.

Since our world is three-dimensional, some effort is made to improve the spatial visualization ability of students. In addition, the principles of orthographic projection and descriptive geometry are learned.

Students work in teams on a series of short-term projects with the goal of recognizing and developing behaviors associated with consensus decision-making and cooperative teamwork. The steps of the engineering design process are learned.

**1 Class Hour, 3 Lab Hours**

### EGR 151
**Engineering Design II** **(2)**

A continuation of Engineering Design I. The bulk of this course focuses on developing skill with a computer aided drawing (CAD) program to create and manipulate three dimensional solid models. Students continue working in teams on design projects with the goal of understanding and implementing the engineering design process for problem-solving. The area of engineering ethics is investigated to create in students a realization of the importance of responsible behavior in the engineering field.

**1 Class Hour, 3 Lab Hours; Prerequisite: EGR 150; Corequisite: None.**

### EGR 200
**Engineering Orientation: Student Success III** **(.5)**

A continuation of EGR 101: This course is designed to enhance student success by addressing five primary themes: community building, professional development, academic success strategies, personal development, and orientation to the college environment. This is an interactive course with emphasis on group problem solving and experiential learning. Common examinations, field trips to industry, visits by four year engineering recruiters, and oral presentations are included as components of this course.

**2 Lab Hours**

### EGR 201
**Engineering Orientation: Student Success IV** **(.5)**

A continuation of EGR 200: This course is designed to enhance student success by addressing five primary themes: community building, professional development, academic success strategies, personal development, and orientation to the college environment. This is an interactive course with emphasis on group problem solving and experiential learning. Common examinations, field trips, visits to four year engineering schools, and oral presentations are included as components of this course.

**2 Lab Hours**

### EGR 281
**Mechanics (Statics)** **(3)**

Fundamental concepts of the statics of rigid bodies developed by using a vector analysis approach. Force systems, centroids and centers of gravity, analysis of structures, shear and bending moments, friction and moments of inertia.

**3 Class Hours; Prerequisite: MAT 181 Calculus I and PHY 181 Physics I.**

### EGR 282
**Mechanics (Dynamics)** **(3)**

Vector analysis approach to kinematics and kinetics of particles, systems of particles, kinematics and kinetics of rigid bodies, forces, mass, acceleration, impulse, momentum, work and energy techniques.

**3 Class Hours; Prerequisite: EGR 281 Mechanics (Statics).**

### EGR 283
**Strength of Materials** **(3)**

Elementary analysis of the strength and deformation of deformable bodies. Topics include stress-strain, torsion, bending, Mohr's circle, flexure, energy methods, and columns.

**3 Class Hours; Prerequisite: EGR 281 Mechanics (Statics).**

### EGR 284
**Materials Science** **(3)**

Atomic model, bonding, lattice concept, crystal types, imperfections, stress and temperature effects, phase diagrams, alloys, ceramics, polymers, composites, corrosion, electrical and magnetic properties materials

**3 Class Hours; Prerequisite: PHY 182 Engineering Physics II and CHM 145 Chemistry.**

### EGR 285
**Electrical and Electronic Circuits** **(3)**

(Available in ASL mode)

Units and definitions; charge, current, voltage, power, energy. Ohm's Law, active and passive elements, independent and dependent sources. Resistance, Kirchhoff's Laws, network reduction. Nodal and mesh analysis techniques, source transformation, superposition. Thevenin's and Norton's theorems, maximum power transfer. Capacitance and inductance; natural, forced, and complete response of switched R-L, R-C, and R-L-C circuits. A.C. sinusoidal steady state analysis. Ideal and practical operational amplifier circuits. Frequency response of parallel and series R-L-C circuits and filter networks. Computer aided circuit analysis using PSPICE.

**3 Class Hours; Prerequisite: MAT 182 Calculus II and EGR 289 Introduction to Microprocessors.**

### EGR 287
**Engineering Design III** **(1)**

This course is the third course in a four course design sequence. This course is intended to prepare engineering students for the future challenges of design. Design is presented as the integration of creativity, knowledge, skills, collaboration and hard work to solve problems. Emphasis will be on achieving design solutions that are high quality, innovative, low cost, and produced quickly. The design process provides a structure in which the various phases of design occur in a logical and efficient sequence in order to arrive at the most successful outcome. This course will present the best of traditional design practices as well as several design tools. Creativity methods will be presented and creativity encouraged in the course. Group design projects with oral presentations are required as part of this course.

**3 Lab Hours; Prerequisite: EGR 151; Corequisite: EGR 289.**

### EGR 288
**Engineering Design IV** **(1)**

This fourth course in design is intended to prepare engineering students for the future challenges of design. Design is presented as the integration of creativity, knowledge, skills, collaboration and hard work to solve problems. Emphasis will be on achieving design solutions that are high quality, innovative, low cost, and produced quickly. The design process provides a structure in which the various phases of design occur in a logical and efficient sequence in order to arrive at the most successful outcome.

This course will present the best of traditional design practices as well as several design tools. Creativity methods will be presented and creativity encouraged in the course. Group design projects with oral presentations are required as part of this course. Students are encouraged to enter their completed design projects in regional and national competitions.

**3 Lab Hours; Prerequisite: EGR 287.**

### EGR 289
**Introduction to Microprocessors** **(3)**

(Available in ASL mode)

An introduction to microprocessors with digital logic, machine and assembly language programming, serial and parallel input/output, A/D, and hardware interfacing with switches, lights, etc. Projects and simulation laboratory experiences using EWB are included as part of this course.

**2 Class Hours, 3 Lab Hours; Prerequisite: PHY 182; Corequisite: EGR 287 Engineering Design III.**

### EGR 298
**Cooperative Work Experience** **(1-4)**

Student/s undertake/s an independent supervised work experience in industry under the guidance of a faculty member. Only one cooperative work experience course allowed per semester.

**Equivalent Load: 1 Class Hour; Prerequisite: Department approval.**

### EGR 299
**Independent Project** **(2-4)**

The student/s undertake/s an independent project in his/her specialty under the guidance of a faculty member. Only one independent study course allowed per semester. Special consideration will be given to design projects.

**Prerequisite: Department approval.**

## EMERGENCY MEDICAL TECHNICIAN

### EMT 110
**Basic Emergency Medical Technician** **(8)**

Prepares student for basic level life support. How to assess medical emergencies and function with no special equipment. Lecture and lab format allows student hands on practice with triage, vital signs, bandaging and splinting, rescue breathing and CPR. CPR Certification is part of this class. May be taken by any student.

**110 Lecture Hours; 10 Lab Hours; Prerequisite for PMD 201 Paramedic.**

### EMT 120
**Intermediate Emergency Medical Technician** **(6)**

Focus on trauma skills with intravenous theraphy and advanced airway management.

**Prerequisite: EMT 101 Basic Emergency Medical Technician Lecture/Laboratory.**

### EMT 130
**Critical Care** **(12)**

Knowledge of the acute and critical changes in physiology, pathophysiology, and clinical signs and symptoms of acute disease and trauma states as they pertain to pre-hospital emergency care.

**Prerequisite: Current New York State EMT Certificate (Basic) Lecture/laboratory.**

## ENGLISH

### ENG 090
**Basic Language Skills** **(0)**

A writing-workshop course designed to prepare inexperienced writers for the critical thinking and academic writing that are the foundations of English 110. Students learn to write essays that are focused, full, and coherent. Students also learn to edit their writing according to the conventions of standard written English.

**4 Class Hours - 4 Credit-Equivalents; Prerequisite: Placement Test.**

### ENG 106
**English as a Second Language, Intermediate II** **(3)**

Advanced study of the English language for international students. Emphasis on the development of basic English compositional skills. Continued practice in listening, reading, and speaking.

**3 Class Hours; Prerequisite: ESL 113, 114, 115 or Placement Test.**

* ASL mode courses are available through the Internet.

### ENG 107
**English as a Second Language, Advanced I** (3)

This course integrates academic reading and writing and critical thinking for non-native speakers of English. Students practice different writing processes and rhetorical strategies in order to write essays that are purposeful, thoughtful, and coherent, and that conform to the conventions of standard written English. They practice vocabulary-building techniques and review grammatical structures needed for effective communication. They understand writing as a social and collaborative process.

**3 Class Hours (Equivalent to ENG 110 for international students); Prerequisite: ENG 106 or Placement Test.**

### ENG 108
**English as a Second Language, Advanced II** (3)

This course, designed for non-native speakers of English at an advanced level of proficiency in written English, focuses on sophisticated analyses and evaluations of texts and on the writing of essays that expand and refine thinking about issues and ideas from across the disciplines. Students analyze and evaluate ideas and information from a variety of sources, including electronic databases and networks. They acquire the skills to choose the appropriate rhetorical stance for different ideas, purposes, and audiences and produce thesis-centered essays as a result of synthesizing multiple positions on global issues.

**3 Class Hours (Equivalent to ENG 111 for international students); Prerequisite: ENG 107 or Placement Test.**

### ENG 110
**College Writing I** (3)

Students learn to use writing to develop their thinking and to read texts critically for both form and content. They practice different writing processes and rhetorical strategies in order to write essays that are purposeful, thoughtful, and coherent, and that conform to the conventions of standard written English. They understand writing as a social and collaborative process, both as a mode of individual expression and as a rhetorical act.

**3 Class Hours; Prerequisite: Placement Test.**

### ENG 111
**College Writing II** (3)

Students produce sophisticated analyses and evaluations of texts and write essays that expand and refine their thinking about important ideas and issues. They analyze and evaluate ideas and information from a variety of sources, including electronic databases and networks, providing appropriate documentation. Students extend their writing maturity by learning to choose an appropriate rhetorical stance for different ideas, purposes, and audiences, and to assert an original thesis as a product of synthesizing ideas from multiple perspectives.

**3 Class Hours; Prerequisite: ENG 110 College Writing I or Placement Test.**

### ENG 150
**Technical Writing** (3)

This introductory course in technical communication offers a practical approach for writing and speaking effectively in professional, technical environments. The course emphasizes analytical methods for understanding and fulfilling the communicational needs of one's audience and gives students opportunity to practice and apply these communication techniques. (This course is for students in Engineering Technology programs.)

**3 Class Hours; Prerequisite: ENG 110 College Writing I.**

### ENG 163
**Reporting** (3)

An introduction to news reporting for print journalism. Students will consider what makes the news and sources of news. Concentrating on newswriting as it is practiced by newspapers, they will analyze news stories, try out interview strategies, and write stories in which they follow newspaper conventions of structure and style. Students will participate in writing for the school newspaper.

**3 Class Hours; Prerequisite: ENG 110 College Writing I.**

### ENG 168
**News Editing** (3)

An introduction to news editing and layout and design for print journalism. Students will explore editing, headline writing, caption writing, and page layout and design. Students will participate in editing the school newspaper.

**3 Class Hours; Prerequisite: ENG 110 College Writing I.**

### ENG 170
**Creative Writing** (3)

Designed to provide students interested in imaginative writing with the opportunity to investigate concepts and to practice techniques implicit in prose, poetry, and drama. Class discussion, workshops, and personal conferences with the instructor.

**3 Class Hours; Prerequisite: ENG 110 College Writing I.**

### ENG 175
**Creative Writing – Publication** (4)

Designed to provide students interested in imaginative writing with the opportunity to investigate concepts and to practice techniques implicit in prose, poetry, and drama. Class discussion, workshops, and personal conferences with the instructor. Writing, evaluating, and arranging material for a campus literary journal.

**4 Class Hours; Prerequisite: ENG 110 College Writing I.**

### ENG 210
**Advanced Writing** (3)

An intensive writing course that emphasizes critical and imaginative thinking as well as collaboration among writers. The course provides a supportive environment in which students work rigorously to continue their development as writers at the same time that they acquire strategies to support the growth of their fellow writers. The course includes a tutoring component that requires a 10-hour commitment to tutoring in the Writing Center. Students begin their tutoring at mid-semester. To benefit from the course, the student need not be an accomplished writer but should enjoy writing and have an interest in helping other writers.

**3 Class Hours; Prerequisite: Eng 110 College Writing I.**

### ENG 212
**Writing on the Net** (3)

This course will investigate how writing changes for both the writer and the reader when presented on a network of computers with multimedia. Students will explore writing on several networks, including LAN, Internet, and the Worldwide Web, and study how the roles of reader and writer change in networked text. They will discover and analyze the growing number of e-zines that have arisen on the Web, will work with the powerful research tools available on the Net, and finally will develop their own home page model. No computer expertise will be needed.

**3 Class Hours; Prerequisite: Eng 110 College Writing I.**

### ENG 220
**Communicating About Ideas and Values** (3)

Critical analysis of issues and moral problems affecting all thinking adults. Selected readings organized around broad themes. Required writing assignments and oral communication. Required of most degree students.

**3 Class Hours; Prerequisite: ENG 110 College Writing I and completion of at least one but preferably two Writing Emphasis ("W") courses.**

### ENG 299
**Independent Study: English** (3)

An individual student project concerned with advanced work in a specific area of language or literature. Conducted under the direction of a faculty member, independent study is concerned with material beyond the scope and depth of the ordinary course.

**Prerequisite: One semester of college level work including ENG 110 College Writing I.**

## ENGLISH AS A SECOND LANGUAGE

### ESL 003
**English as a Second Language, Elementary Grammar** (4)

Introduction of basic English grammar, both oral and written, for non-native speakers. Curriculum will include study of basic verb tenses, noun categories, and basic affirmative, negative, and interrogative sentence patterns. The material will reinforce what is taught in ESL 004 and 005. Taken together these courses are referred to as the ESL 003 Series. (This course is not acceptable for credits toward a degree.)

**4 Class Hours, 2 Laboratory Hours; Prerequisite: Diagnostic Test.**

### ESL 004
**English as a Second Language, Elementary Oral/Aural Skills** (4)

A course for students who speak little or no English. The sounds of English are presented systematically and language laboratory practice is required. Ear training is begun and strengthened through work in the listening laboratory. Students are taught communicative skills from the outset, and the emphasis is on speaking and being understood. (This course is not acceptable for credits toward a degree.)

**4 Class Hours, 2 Laboratory Hours; Prerequisite: Diagnostic Test.**

### ESL 005
**English as a Second Language, Elementary Reading Skills** (4)

For non-natives who had little exposure to written English. Basic sentence structure and vocabulary will be studied in order to improve student's comprehension, from simplified reading texts to those of increasing complexity. Writing skills, simple sentence structures, and organization skills are also stressed. (This course is not acceptable for credits toward a degree.)

**4 Class Hours, 2 Laboratory Hours; Prerequisite: Diagnostic Test.**

### ESL 102
**English as a Second Language, Basic Writing Skills (5)**

Introduction to the basic rhetorical/sentence patterns of English and their usage, organizational and developmental writing skills. Focus on the expression of ideas/concepts and their presentation in simple and complex sentence form, proofreading and editing skills, note taking, outlining and computer assisted instruction. (This course is not acceptable for credits toward a degree.)

**4 Class Hours, 3 Laboratory Hours; Prerequisite: Diagnostic Test.**

### ESL 103
**English as a Second Language, Grammar Review (5)**

Intensive review of pre-intermediate levels of the English language for international students. Emphasis on listening, reading, speaking and some aspects of writing. Audio-lingual laboratory. (This course is not acceptable for credits toward a degree.)

**4 Class Hours, 2 Laboratory Hours**

### ESL 104
**English as a Second Language, Basic Speech (4)**

To provide international students with practice, articulation and vocabulary needed to increase self-confidence in English conversation, discussion in the classroom and other daily situations. Audio-lingual laboratory. (This course is not acceptable toward a degree.)

**3 Class Hours, 2 Laboratory Hours**

### ESL 105
**English as a Second Language, Basic Reading (4)**

Review of English sound-symbol correspondence, utilization of brief recombinations of variations of narratives and dialogues, and acquisition of simple reading techniques through exposure to uncomplicated reading selections. Vocabulary and reading comprehensive development, audio-lingual practice — active, passive, comparative. Audio-lingual laboratory. (This course is not acceptable for credits toward a degree.)

**3 Class Hours, 2 Laboratory Hours**

### ESL 113
**English as a Second Language, Intermediate Composition (4)**

Study of the English language for international students with listening, reading, speaking, writing skills on the intermediate level. Language workshops emphasizing grammar, syntax, vocabulary and composition. Audio-lingual laboratory. (This course is not acceptable for credits toward a degree.)

**3 Class Hours, 2 Laboratory Hours; Prerequisite: ESL 103 English as a Second Language, Grammar Review or equivalent.**

### ESL 114
**English as a Second Language, Intermediate Speech (4)**

Designed for international students emphasizing free and controlled conversation and discussion. Continues practice in articulation, phrasing and vocabulary building. Audio-lingual laboratory. (This course is not acceptable for credits toward a degree.)

**3 Class Hours, 2 Laboratory Hours; Prerequisites: ESL 104 English as a Second Language, Basic Speech or equivalent.**

### ESL 115
**English as a Second Language, Intermediate Reading (4)**

Study of lexical, grammatical, and social-cultural meaning through intensive and extensive reading. Establishment of reading fluency and comprehension. Direct and audio-lingual practice with selected text and independence in English. Continues development of vocabulary and reading comprehension. Direct and audio-lingual practice with selected texts and exercises. Audio-lingual laboratory. (This course is not acceptable for credits toward a degree.)

**3 Class Hours, 2 Laboratory Hours; Prerequisite: ESL 105 English as a Second Language, Basic Reading or equivalent.**

## FRENCH

### FRE 101, 102
**Beginning French (4, 4)**

An introduction to the basic principals of grammar. Emphasis on oral practice in classroom. Students will learn to appreciate the French culture through discussions and examination of real life situations in France & Francophone countries.

**4 Class Hours; Prerequisite: FRE 101 Beginning French for FRE 102.**

### FRE 201, 202
**Intermediate French I and French II (3)**

Intensive review of grammar and syntax. A cultural, conversational and literary approach to French language. Students will continue learning about the French & Francophone cultures and examine them and be prepared to handle various situations.

**4 Class Hours; Prerequisite: FRE 102 Beginning French for FRE 201.**

## FIRE PROTECTION

### *FRS 101
**Fire Prevention and Protection (3)**

Methods, policies and procedures relative to establishing and operating appropriate fire prevention and protection programs.

**3 Class Hours**

### *FRS 103
**Fire Fighting Tactics and Strategy (3)**

Focus on pre-planning and the development of fire fighting tactics appropriate for a wide variety of hazards. Review of basic information and some local conditions. The case study method is used to develop plans and tactics relating to the student's own department.

**3 Class Hours**

### *FRS 105
**Arson Investigation (3)**

Fire investigations and arson. Responsibilities of the arson investigator, tools of the investigator, photography, electronic devices, laws pertaining to arson, motives and tools of the arsonist, courtroom procedures. A field experience will be included.

**3 Class Hours**

### *FRS 107
**Legal Aspects of the Fire Service (3)**

Laws and regulations as they pertain to the fire service and its personnel. Legal terminology necessary for the interpretation of pertinent laws and decisions. Legal status of the fire fighter, as well as fire fighter's rights, duties and liabilities. Responsibilities and powers of the service in enforcement of ordinances and codes.

**3 Class Hours; Writing Emphasis Course.**

### *FRS 108
**Building Construction for Fire Science (3)**

Fire fighters are confronted with many unknown factors at the fire ground. Among these is the unknown structural stability of the buildings they must enter. Basic principles of building construction and design with emphasis focused on fire protection concerns. Building materials included.

**3 Class Hours**

### *FRS 110
**Computers in the Fire Service (3)**

Introductory concepts of micro-computer use in Fire Science settings. Software packages, hardware and software purchasing relating to Fire Service usage, word processing, data base management and spreadsheet application to student generated problems.

**3 Class Hours**

### *FRS 200
**Hazardous Materials (3)**

Chemicals and chemical processes most closely involved in fire protection and fire fighting. Use, storage, transportation and disposal of hazardous materials with emphasis on flammable liquids, flammable solids, oxidizing materials, corrosive liquids, compressed gases. A writing emphasis "W" course.

**3 Class Hours**

### *FRS 201
**Fire Service Hydraulics (3)**

Application of the laws of mathematics and physics to properties of fluid states, force pressure and flow velocities. Emphasis on applying principles of hydraulics to fire fighting problems.

**3 Class Hours; Prerequisite: MAT 092 or equivalent.**

### FRS 204
**Protection and Suppression Systems (3)**

Design, installation, operation, and trouble shooting of various systems. Extinguishers, alarms, sprinkler systems, chemical approaches, and Halon systems. Projects and field trip included.

**3 Class Hours**

### *FRS 205
**Fire Department Administration (3)**

Organization of the fire departments with emphasis on personnel management, distribution of equipment, maintenance of records, communications, data collection and community relations. ISO Grading Schedule.

**3 Class Hours**

### *FRS 250
**Special Topics (1-3)**

Exploration of special topics in Fire Protection Technology. May be repeated since topics will vary from semester to semester. Special topics have included The Psychology of the Firesetter and Code Enforcement.

### *FRS 299
**Independent Study: Fire Service (1-3)**

An individual student project in an area of fire protection or service beyond the scope of regular coursework. Conducted under supervision of coordinator and approved by department chairperson and Dean.

**Prerequisite: 6 Credits in FRS coursework and 6 Credits in General Education courses.**

* Taught evenings only and when enrollment permits.

## GEOGRAPHY

### GEO 120
**World Cultural Geography (3)**

Description and analysis of human or cultural use of physical space, economics, religious, linguistic, and political phenomena in major world areas. A regional approach is used to highlight the phenomena.

**3 Class Hours**

## GERMAN

### GER 101, 102
**Beginning German (4, 4)**

Basic principles of grammar and syntax. Emphasis on oral practice in classroom. Written homework assignments supplemented by work in audio-lingual laboratory. Reading and discussion of graded literary and cultural texts.

**4 Class Hours; Prerequisite: GER 101 Beginning German for GER 102.**

### GER 201
**German Conversation and Composition (3)**

Emphasis on the four language skills – reading, writing, speaking, listening – especially on speaking and writing. Intensive discussion of style, grammar and the contemporary idiom to enhance the student's ability to express himself in German.

**3 Class Hours; Prerequisite: GER 102 Beginning German.**

## HEALTH CARE MANAGEMENT

### HCM 193
**Introduction to U.S. Healthcare Systems (3)**

A survey of the American Health Care System that examines the elements related to the organization, delivery, financing and planning of health services.

**3 Class Hours**

### HCM 194
**Healthcare Financing (3)**

This course will present the United States' health care system from a cost perspective. Students examine the history of health care costs in the U.S., the nature of competition, the characteristics of the market for medical services that influence competition, and the implications of these factors on the health care sector of our economy. Special emphasis will be placed on the most current legislation and administrative proposals/enactments.

**3 Class Hours; Prerequiste: HCM 193 or permission of instructor.**

### HCM 195
**Managed Health Delivery Systems (3)**

Managed Health Delivery Systems is designed to engage students in a learning process about the intricacies of managed care. It will provide a core of basic information about managed care in the United States — history, promises and shortcomings. In addition, this course will focus on managerial parameters of managed care. Strategies for marketing services, physician recruitment and price quality competition will be presented in the context of the new market place realities. Finally, consumer health behavior and utilization dynamics will be discussed and evaluated from the standpoint of their practical rather than theoretical significance.

**3 Class Hours; Prerequisite: HCM 193 or permission of instructor.**

### HCM 196
**Healthcare Ethics (3)**

Health care ethics is designed for health care professionals and students planning to enter the health care field. It offers participants the chance to understand health care ethics. Some topics covered in the course will include: autonomy in long-term care settings and withdrawing fluids and nutrition, euthanasia, and physician assisted suicide (medicide); HIV, reproductive rights, allocating health care resources, institutional missions, and obligations, competition and entrepreneurship in health care, and rationing.

**3 Class Hours**

### HCM 197
**Economics of Health & Medical Care (3)**

Economics of Health and Medical Care is designed for students that seek an understanding of the tools, vocabulary, and way of thinking about economics as it is applied to decision making in the delivery of health services, administration, and policy. The basic methods of micro-economics will be emphasized as tools to help individuals, organizations, and policy makers, make better decisions about health care in the United States.

**3 Class Hours; Prerequisite HCM 193 and HCM 194.**

### HCM 198
**Long-Term Care (3)**

Long-term care will be studied in its current and dynamic environment. Students will learn how long-term care has evolved in the United States. Specific emphasis will be placed on levels of care, payment systems, social and economic concerns, current legislative initiatives, and the future needs of our expanding long-term care population.

**3 Class Hours**

## HISTORY

### HIS 100
**The Rise of The West: 1500-Present (3)**

Introduction to both the study of history and the evolution of modern society, including its basic ideas, values and institutions, through an examination of Western Civilization. The Age of Transition – the Renaissance, the Reformation, the Scientific Revolution, and the Enlightenment. The Industrial Transformation, appearance of modern constitutional and authoritarian government, major socio-political ideologies – liberalism, socialism, communism, nationalism, imperialism, fascism, totalitarianism. The intellectual crisis of the 20th Century, World Wars I and II; the Rise and Fall of the Cold War.

**3 Class Hours**

### HIS 116
**The West and the World to 1500 (3)**

A course in world history to 1500CE. Prehistory and the origins of civilization. Development of early civilizations in western Asia, Africa, India, China, and the Americas. Classical Mediterranean civilizations (Greece, Rome). Medieval civilizations of Europe, Asia, Africa, and the Americas. Development of cities, writing, technology, trade, and cultural traditions. Material and cultural exchanges between civilizations. Beginnings of the modern world.

**3 Class Hours**

### HIS 117
**The West and the World since 1500 (3)**

A course on modern Western civilization in relation to other civilizations and societies. Early modern societies of Europe, Asia, Africa, and the Americas. Age of discovery and the first colonial empires. Early development of world trade and cultural exchange. Renaissance and reformation, scientific, technological, and industrial revolutions. Age of the Atlantic revolutions in Europe and the Americas. Evolution of modern social and political life. Age of imperialism. Era of the two world wars and political changes in Europe, Asia, and the Americas. The Cold War and the collapse of the colonial empires. The contemporary world.

**3 Class Hours**

### HIS 130
**United States History I (3)**

The United States from 1607 to 1877. The colonies, Revolution, Constitution, early national period, Jacksonian era, expansion, Civil War and Reconstruction, and Westward Movement. Survey of political, economic, social and cultural developments through most of the 19th century. Satisfies the civic education requirement.

**3 Class Hours**

### HIS 131
**United States History II (3)**

The United States from 1877 to the present. The closing of the frontier, the American Empire, progressive reforms, World War I, the Twenties, Depression, New Deal, World War II, the Cold War, Civil Rights, Vietnam, and the present. Emphasis on Political, Cultural, Social and Economic & Developments. Satisfies the civic education requirement.

**3 Class Hours**

### HIS 141
**History of Modern Latin America and the Caribbean (3)**

History of Latin America and the Caribbean from independence to the present, emphasizing distinctive cultures, power relations between indigenous peoples and elites, the causes of political instability and economic backwardness. Close analyses of reform, reactionary, and revolutionary movements in the hemisphere and inter-American affairs.

**3 Class Hours**

### HIS 155-159 SERIES
**Themes in Western Civilization (3)**

### HIS 155
**War and the Western World (3)**

A survey course from 1500 to the present examining the interaction of Western Civilization and warfare. Major emphasis will be on how warfare/military developments helped to shape Western Civilization as well as a distinctive Western style of warfare. Specific concern will be given to the role of gunpowder, industrialization, nationalism, as well as economic, social, and cultural factors. Exploration of how the West used its distinctive style of warfare to dominate the rest of the world and to spread Western influence and institutions will also be considered.

**3 Class Hours**

### HIS 162
**China and Japan: Tradition and Transformation (3)**

Origins of Chinese and Japanese civilizations are surveyed, and the development of major cultural traditions are examined. Pre-modern times, modernization periods, and contemporary times are analyzed in depth including such focal points and topics as family life, gender roles, social structure, responses to

Westernization, and the places of the two nations and societies in the Twenty-first Century.

**3 Class Hours**

### HIS 175
**Local History** **(3)**

This introductory study encompasses the history of Broome County and, where relevant, the larger upstate New York area. Areas of exploration include: early presence of the First Peoples (Native Americans) from the early woodlands period to the Iroquois Confederacy, late 18th and 19th century Anglo settlement with cultural, religious, and land use perspectives, canal, railroad, industrial and factory growth fueled by rural migrants and European immigrant groups, as well as recent changes in County growth and demographics. Historical methods of research will be used, along with actual exploration of historical aspects of the County, for instance, the homes of Riverside drive or the Chenango Canal. We will utilize the archival and historical records on the premises of cooperative local institutions.

**3 Class Hours**

### HIS 180
**Utopia: American Visions of the Good Society** **(3)**

Examines the functions of the Utopian Impulse throughout American History by examining a series of thought experiments/or actual experimental communities. To include comparative analysis of various American utopian writers such as Edward Bellamy, C.P. Gilman and W. W. Wagar etc. Consideration will also be given to such experimental communities as the Shakers, the Oneida Perfectionists, the communes of the 1960s, etc.

**3 Class Hours**

### HIS 183
**Women's History** **(3)**

The "other" history: that of women from prehistory to the modern era. Review of philosophical, religious, social, and political attitudes about and practices toward women. Women's lives, achievements, and roles in Western and other civilizations. Emphasis is on the United States.

**3 Class Hours**

### HIS 185
**Hitler and the Nazi Dictatorship** **(3)**

Origins of National Socialism, role of Adolf Hitler, road to Nazi Dictatorship, Nazi political and social revolutions. Hitler's foreign policy and Europe's reaction, World War II and Hitler's "New Order," Nazi system of persecution and genocide, collapse of the 1,000-year Reich, legacy of the Hitler period.

**3 Class Hours**

### HIS 187
**The United States Civil War: Causes and Effects** **(3)**

A study of American institutions within the timeframe of 1815-1877; examination and analysis of Antebellum politics, society, and culture; origin and nature of the American Civil War and the social, economic and political changes brought about by the War and Reconstruction.

**3 Class Hours**

### HIS 188
**Vietnam and America** **(3)**

A course on the Vietnam War and American society. Background: modern Vietnam, war and American culture, the Cold War. The War: military and political aspects, the soldier's experience. The homefront: social developments, the media, the anti-war movement. The legacy of the war.

### HIS 189
**First Peoples: Native American History** **(3)**

An introduction to the history of Native North Americans from their earliest history to the present day. From New England to the Southwest, various Indian cultures will be examined by region and time period. Early creation beliefs, religious, social, and political practices, peace and conflict, family life, environmental adaptations, frontiers and borderlands, and archaeological and artistic survivals will be covered. Emphasis will be on the period since Europeans arrived in the present-day United States. Particular interest will be given our local Haudenosaunee (Iroquois), and their contacts with French and English colonists. Modern day legal and geographical conflicts will be reviewed.

**3 Class Hours**

### HIS 194
**Readings in African-American History** **(3)**

A survey of African-American thought, including the ideas of Booker T. Washington, W.E. DuBois, Marcus Garvey, Martin Luther King, Jr., and Malcolm X. In addition, attention will be given to 19th century West Africa and the problems affecting African-American society.

**3 Class Hours**

### HIS 210-280
**Special Topics in History** **(1-3)**

Additional history courses are available besides those listed here in the College Catalog. For further information consult the college master schedule or department chair.

### HIS 299
**Independent Study** **(1-3)**

An independent study project which is beyond the scope of courses currently offered by the department, directed by a faculty member with approval of the department chairperson. Independent study does not satisfy the Liberal Arts requirement in history, and it may not be taken in lieu of a 100-series course.

**Prerequisite: 3 hours of College History.**

## HEALTH INFORMATION TECHNOLOGY

### HIT 101
**Introduction To Health Information Systems** **(4)**

Introduction to the organization of healthcare delivery and overview of the profession. Definition of, standards for, and development of a medical record as to content, format, evaluation and completion. Numbering and filing systems and methods; registries and indexes, forms and screen design.

**3 Class Hours; Corequisite: HIT101L Introduction to Health Information Systems Laboratory.**

### HIT 101L
**Introduction To Health Information Systems Laboratory** **(0)**

Practical application in the medical record laboratory of the principles described in the lecture mode of this course.

**2 Laboratory Hours; Corequisite: HIT 101 Introduction to Health Information Systems.**

### HIT 106
**Medical Terminology** **(3)**

A study of the language of medicine, including suffixes, prefixes and root words. Emphasis on terminology associated with the anatomic systems.

### HIT 107/MDA 106
**Medical Transcription and Correspondence** **(4)**

Introduction to equipment/software used for computerized transcription services. Fundamentals of medical transcription to include correspondence and various medical reports such as History and Physical examinations, operative reports, consultation reports, discharge summaries, radiology reports and pathology reports.

**4 Class Hours; Prerequisite: HIT 106 Medical Terminology and MDA 104 Keyboarding and Medical Word Processing or permission of instructor.**

### HIT 116
**Health Statistics** **(3)**

A study of methods for compiling statistics for hospital administration, medical staff, and licensing and accrediting agencies. Vital statistics, public health statistics, and hospital statistics are covered. An introduction to research techniques with graphic presentation of medical data is also covered.

**2 Class Hours; Prerequisite: HIT 101 Introduction to Health Information Systems; Corequisite: HIT 116L Health Statistics Laboratory.**

### HIT 116L
**Health Statistics Laboratory** **(0)**

Applications of the principles learned in the lecture mode of this course.

**2 Laboratory Hours; Corequisite: HIT 116 Health Statistics.**

### HIT 144
**Clinical Affiliation I** **(2)**

Supervised professional practice assignments structured so that students gain experience in applying knowledge to technical procedures in health information systems.

**60 Clinical Hours over 10 Weeks; Prerequisites: HIT 101 Introduction to Health Information Systems, HIT 116 Health Statistics, HIT 222 Medical Legal Aspects.**

### HIT 203
**Computers In Health Care** **(3)**

Identification of computer applications in the health care industry; types of hardware and software systems; integrated and non-integrated computerized health information systems; organization of an information resource management program; components of a health care facility database, principles of database coding design, data dictionaries; computerized (paperless) patient health records; overview of systems analysis approach in the selection and development of an information system; data quality; methods to control computer security and confidentiality; strategies for report management; issues related to electronic vs optical disk systems; local and wide area networking.

**3 Class Hours; Prerequisites: CST 105 Understanding Computers; HIT 101 Introduction to Health Information Systems.**

### HIT 204
**Inpatient Coding System** **(4)**

Principles and application of the ICD-9CM Classification System. Introduction to the prospective

payment system to include DRG assignment, case mix analysis, severity of illness system and data quality.

**3 Class Hours; Prerequisite: BIO 132 Human Biology II; Corequisite: HIT 204L Inpatient Coding System Laboratory.**

### HIT 204L
**Inpatient Coding System Laboratory (0)**

Actual practice of coding medical records and assignment of DRGs utilizing both a manual method and an encoder software sytem.

**3 Laboratory Hours; Corequisite: HIT 204 Inpatient Coding System.**

### HIT 205
**Coding Practicum (2)**

Supervised professional practice assignment to provide the student with coding practice in a simulated hospital setting.

**40 Clinical Hours; Corequisites: HIT 204 Inpatient Coding System and HIT 144 Clinical Affiliation I**

### HIT 208
**Advanced Medical Transcription (4)**

Transcription of authentic physician-dictated reports organized by body systems or medical specialties. Emphasis on advanced skills, developing accuracy, speed and additional detailed study of medical terminology. Emphasis on the basic medical reports as well as specialized reports relating to the various body systems. Emphasis also on using references and other resources efficiently, editing and proofreading techniques.

**4 Class Hours; Prerequisite: HIT 107 Medical Transcription or MDA 106 Medical Correspondence & Communication.**

### HIT 210
**Management Principles for Health Information (3)**

Principles of management, planning, organizing, controlling, and directing as they relate to and are integrated with specific applications to health information management functions. Principles of personnel supervision are also included.

**2 Class Hours; Prerequisite: HIT 236 Quality Improvement; Corequisite: HIT 210L Management Principles for Health Information Laboratory.**

### HIT 210L
**Management Principles for Health Information Laboratory (0)**

Practical applications of the principles discussed in the lecture mode.

**2 Laboratory Hours; Prerequisites: HIT 144 Clinical Affiliation I; Corequisite: HIT 210 Management Principles for Health Information.**

### HIT 214
**Ambulatory Care Coding (3)**

A study of nomenclature/classification systems such as CPT-4 and ICD-9-CM as it relates to ambulatory health care. Overview and application of policies and procedures for ambulatory care coding and data collection. Theories of ambulatory payment methodologies are studied.

**2 Class Hours; Prerequisite: HIT 204 Inpatient Coding System; Corequisite: HIT 214L Ambulatory Care Coding Laboratory.**

### HIT 214L
**Ambulatory Care Coding Laboratory (0)**

Practical applications of the principles discussed in the lecture mode.

**2 Laboratory Hours; Corequisite: HIT 214 Ambulatory Care Coding Laboratory.**

### HIT 220
**Survey of Healthcare Delivery (2)**

The study of the regulatory issues, content, use and structure of health care data and data sets as they relate to long term care facilities, home health agencies, hospices, mental health facilities, ambulatory care, physicians offices and others. The financing of health care services will be discussed as it relates to the various payment and reimbursement systems.

**2 Class Hours; Prerequisites: HIT 101 Introduction to Health Information Systems.**

### HIT 222
**Medical Legal Aspects (3)**

Introduction to legal aspects of medical records. Legal basis for medical practice, confidentiality. Patient's "Bill of Rights," voluntary and involuntary release of medical information. Authorizations and consents, professional liabilities, medical-moral issues such as abortion, euthanasia, sterilization, artificial insemination.

**3 Class Hours; Prerequisite: HIT 101 Health Information Systems.**

### HIT 236
**Quality Improvement (3)**

A study of the components of a hospital wide quality assurance program — quality assessment, utilization management, credentialing, and risk management.

**2 Class Hours; Prerequisite: HIT 222 Medical Legal Aspects, HIT 116 Health Statistics and HIT 116L Health Statistics Laboratory.**

### HIT 236L
**Quality Improvement Laboratory (0)**

Practical applications of the principles discussed in the lecture mode.

**2 Laboratory Hours; Prerequisites: HIT 144 Clinical Affiliation I; Corequisite: HIT 236 Quality Improvement Laboratory.**

### HIT 245
**Clinical Practice II (6)**

Professional practice experience in facilities, organizations and agencies related to healthcare. Students will gain experience in technical procedures and in developing professional attitudes for interacting with other professionals and consumers in the healthcare field.

**6 Weeks: 40 Hours per week; Prerequisites: HIT 210 Management Principles for Health Information; HIT 295 Health Information Seminar.**

### HIT 250
**Medical Insurance Billing (2)**

An indepth study of the uses of coded data and health information in reimbursement and payment systems appropriate to all health care settings and managed care.

**2 Class Hours, 1 Laboratory Hour; Prerequisites: HIT 204 Inpatient Coding System and HIT 214 Alternate Classification Systems or permission of instructor.**

### HIT 260
**Advanced Coding (2)**

To develop an understanding of the disease processes as to how they relate to the valid assignment of diagnostic and procedural coding. This will encompass both inpatient and ambulatory coding. Coding and DRG assignments will be enhanced by using an encoder.

**2 Class Hours, 1 Laboratory Hour; Prerequisites: HIT 204 Inpatient Coding System and HIT 214 Alternate Classification Systems or permission of instructor.**

### HIT 295
**Health Information Seminar (2)**

Principles of health information consulting and business requirements for self-employment. Resume preparation and interviewing techniques demonstrated. Guest speakers will give presentations on current topics in the field and profession.

**2 Class Hours; Prerequisite: Senior year status.**

## HUMAN SERVICES

### HMS 146
**Introduction to Gerontology (3)**

Provides an interdisciplinary look at the aging process and social environment of older adults. Theories of aging, as well as physiological and psychological changes will be explored. Emphasis will be on the particular needs of the older adult and the resources, services, and policies to address them.

**3 Class Hours**

### HMS 147
**Eldercare Seminar and Internship (3)**

Through integrated seminars and hands-on work experiences in eldercare settings, policies and practices in eldercare will be explored. Physical, psychological, social, recreational, and environmental needs of older people and how well these needs are accommodated in various care environments will be the focus of class seminars. A service component of four hours per week will allow students the opportunity to mesh theory and practice.

**3 Class Hours**

### HMS 240
**Perspectives on Death and Dying (3)**

Examines individual and cultural beliefs and responses to death, dying and dying people, and the social/psychological patterns that surround them. Hospice care, advanced medical treatment, funeral customs, suicide, and euthanasia are examples of topics explored. An understanding of grief and the grief process is emphasized. Ethical/moral and legal responses to controversial issues are discussed.

**3 Class Hours**

### HMS 250
**Human Service Organizations (3)**

A basic course in the social psychology of groups and organizations. Students will learn about the basic concepts and propositions that provide insight into the organizational dynamics that confront members of all types of human service organizations, such as perception of roles, norms, communication, power, leadership, and other issues. In addition, students will gain a heightened understanding of human service organizational culture issues that are specific to human and health care services in context of their changing economic, political, and ecological environments. The new organizational forms, strategies, and innovations made by human and health care services to these changes (at various organizational levels) will be emphasized.

**3 Class Hours**

### HMS 260
**Special Topics on Aging (3)**

This course is designed to focus on special, current, and/or topical issues related to te field of gerontology and working with the elderly. Topics include leisure and recreational programming for older adults, long term/nursing home care, community based living arrangements, physical therapy for the elderly, health promotion in the elderly, communication/hearing disorders, aging policies and programs, etc. The purpose of the course is to allow for topics introduced in other gerontology courses to be studied in-depth and to facilitate a state-of-the-art awareness of current issues/needs of the older person. Some topics will change from semester to semester.

### HMS 290
**Human Service Field Experience (4)**

A field placement in a health, human service or school setting, under the supervision of faculty supervisor and agency personnel. Objectives for each student's placement are developed in conjunction with the respective agencies, instructor, and student through a learning contract. Students will also participate in a weekly seminar on campus to develop helping-and relationship-building skills with instructor and other students. Each student will complete six hours per week (90 hours/semester).

**1 Class Hour, Prerequisite: Six credit hours of psychology or sociology and concurrent enrollment in three additional credit hours in psychology. For Human Services majors.**

## HONORS

### HON 290-295
**Honors Seminars — Special Topics (4)**

Seminars offered for students enrolled in the Honors Program. Seminars are interdisciplinary in nature and the topics vary by semester. The seminar is intensive, challenging, and presents topics that are not generally available within regular course offerings. This course satisfies an elective requirement.

**4 Class Hours; Prerequisite: Admission to Honors Program, Permission of Director.**

### HON 299
**Honors Independent Study – Selected Topics (1-3)**

To receive an Honors diploma, a student must complete an independent study project under the supervision of a member of the faculty. Topics vary by agreement between the faculty member and the student.

**1-3 Class Hours; Prerequisite: Admission to Honors Program, Permission of Director.**

## HEALTH SCIENCES

### HST 100
**Seminar in Health Sciences (1)**

This seminar will present an overview of the health science professions, many of which are offered at Broome Community College. The focus will be on individual programs as well as how these professions collaborate and interrelate. An introduction to professional behavior and cultural diversity will be included. The class will also develop learning strategies to enhance academic success and acquire a working knowledge of campus services.

**1 Class Hour**

### HST 101
**Cultural Aspects of Health Care (3)**

A complete global exploration of cultural and ethnic diversity as it relates to health and health care providers.

Concepts such as patient belief systems, health practices, illness management, mental health, communication, stereotyping, ethnocentrism and other culturally centered issues are examined.

Lectures and discussions encompass major concerns and issues encountered by the health care professional and patient alike. Recommended for all health professionals who plan to work in a multicultural society such as America.

**3 Class Hours**

### HST 110
**Personal Care Aide (3)**

The personal care aide provides home support to individuals in the community who wish to live at home but who need outside help to do so. Upon successful completion of this program, you will be a New York State Certified Personal Care Aide. This will qualify you for employment giving care to individuals in the comfort of their own home while fostering their independence. This course can be a prerequisite to the Home Health Aide course, which follows immediately upon successful completion of PCA.

**10 Weeks, 6 Hours per week**

### HST 111
**Home Health Aide (2)**

A home health aide is able to perform health related tasks such as performing simple measurements and tests, assistance with the preparation of special diets, with prescribed exercise programs, and with the use of prescribed medical equipment. Upon successful completion of this program students will be a New York State Certified Home Health Aide and qualify for employment in the Home Health field.

**5 Weeks, 6 Hours per week; Prerequisite: HST 110 Personal Care Aide**

## HUMANITIES

### HUM 101
**Western Humanities I (3)**

Critical analysis of western culture through a thematic investigation of literature, philosophy, music, and the arts as found in the ancient Near East, classical Greece and Rome, and Medieval Europe.

**3 Class Hours**

### HUM 102
**Western Humanities II (3)**

Critical analysis of western culture through a thematic investigation of literature, philosophy, music and the arts as found in the Renaissance, early modern and 19th-20th centuries Europe.

**3 Class Hours**

### HUM 103
**The Shock of the New: 20th Century Culture (3)**

A course on the humanities in the twentieth century. The nineteenth-century background. Developments in modern thought. Modernism in music, the visual arts, and literature, 1880-1940. Major cultural movements (expressionism, surrealism, etc.). High modernism, 1940- 1975. New directions in culture (International Style, theatre of the absurd, etc.). Late twentieth century developments, 1975-2000. Recent trends in art, music, and literature (magic realism, the new classicism, etc.).

**3 Class Hours**

## INTERIOR DESIGN

### INT 120
**Surface Materials for the Interior (2)**

Appropriate use of fabrics, wood, laminates, tiles, vinyls, metals and glass is introduced. Durability, cleanability, and flammability of materials will be studies. Aesthetic considerations will be explored. Field trips are an integral part of this course. Excellent for students interested in the building or hospitality industry. Required for Interior Sequence students.

**2 Class Hours**

### INT 210
**Interior Design I (4)**

The studio interior design course requires the student to become well acquainted with the impact of the designed physical environment. Practical, aesthetic and psychological aspects of the built environment are addressed. Skills including conceptualizing in three dimensions, drawing in scale and presentation techniques both graphic and oral are developed. Historic aspects of design and influential architects, designers, journalists, and manufacturers will be investigated. Basic design elements will be applied to two major projects, one residential, one commercial.

**2 Class Hours, 4 Studio Hours; Prerequisites: ART 105; one art history ART 102, 103, 108, 109, 110 or 111; CIV 105 and 159 or CIV 113 and 119.**

### INT 299
**Independent Study: Interior Design (1-4)**

See ART 299

## ITALIAN

### ITA 101, 102
**Beginning Italian (4, 4)**

Basic principles of grammar and syntax. Emphasis on oral practice in classroom. Reading and discussion of graded literary and cultural texts.

**4 Class Hours; Prerequisite: ITA 101 Beginning Italian for ITA 102.**

### ITA 201
**Intermediate Italian I (3)**

Comprehensive review of grammar and structure of the language. Intensive reading of literary works as a basis for topics of conversation in Italian in the classroom. Emphasis on aural comprehension and oral practice in classroom.

**3 Class Hours; Prerequisite: ITA 102 Beginning Italian.**

### ITA 202
**Intermediate Italian II (3)**

Intensive reading of literary works of recognized authors as a basis for topics of conversation in Italian in the classroom.

**3 Class Hours; Prerequisite: ITA 201 Intermediate Italian I.**

### ITA 299
**Independent Study: Italian (1-3)**

An individualized student project concerned with advanced work in specific area of Italian. Conducted under the direction of a faculty member, independent study is concerned with material beyond the scope and depth of the ordinary course.

**Prerequisite: 3 semester hours of college level work in Italian.**

## LAW/PARALEGAL

### LAW 110
**Survey of Paralegalism (3)**

Role of the paralegal and attorney. Introduction to jurisprudence and functions of administrative agencies. Local, state, federal courts. Introduction to contracts, torts, negligence, criminal procedure, real property law, law office management. Legal terminology.

3 Class Hours

### LAW 200
**Real Property Law (3)**

Comprehensive survey of law of real property, emphasizing, practical application to a paralegal function. Analysis of form of deeds, bonds, notes,mortgages, assignments, discharges, purchase of contracts, leases, options. Training in searching title, basic understanding of abstracts of title, real property litigation, estates, condemnation and foreclosure.

**3 Class Hours; Prerequisite: LAW 110 Survey of Paralegalism or permission of department.**

### LAW 207W
**Legal Writing and Research (3)**

Development of legal research and drafting skills through use of digests, reporter systems, and other features of law libraries. Analysis of various types of legal documents for clarity, composition, conciseness. Practice in research and drafting of legal documents. Writing Emphasis Course.

**3 Class Hours; Prerequisites: LAW 110 Survey of Paralegalism, ENG 110 Written Expression I, and 3 additional credits in PLA or department permission.**

### LAW 215
**Estates, Probates and Trusts (3)**

Disposition of descendent's property, law of interstate succession, execution and probate of wills, nature and creation of trusts and the administration of estates and trusts, estate and gift tax preparation.

**3 Class Hours; Prerequisite: LAW 110 Survey of Paralegalism or permission of department.**

### LAW 220
**Contracts (3)**

The law of contracts, their historical significance, formation, validity interpretation, transfer or contractual rights. Assignment, third party beneficiaries, discharge, breach and remedies. (BUS 118 Business Law I may be substituted with department permission.)

3 Class Hours

### LAW 222
**Medical Law (3)**

General coverage of how legal and medical issues are inter-related, including right to treatment, organ transplant, right to die, abortion issues, medical malpractice, informed consent, insanity defense, surrogate mothers. Lecture and discussion. How these topics affect the role of the attorney and paralegal in servicing client needs.

3 Class Hours

### LAW 225
**Family Law (3)**

Pleadings relative to general practice of law in relationships to the family unit. Laws relating to marriage, divorce, annulment, custody and support, adoption, name change, guardianship, paternity. Written pleadings and necessary research pertaining to these aspects of family law.

3 Class Hours

### LAW 226
**Taxation Law for Paralegals (3)**

Principles of federal taxation, analysis of IRS code and related case law, emphasis on law and concepts of taxation, basic and advanced tax law terminology, litigation involving the IRS. Exploration of social changes, and factors involving tax problems, current issues in tax reform, perspective of the paralegal regarding resolution of tax disputes.

3 Class Hours

### LAW 227
**Constitutional Law (3)**

The practice of everyday general law as affected by the U.S. Constitution, and the Bill of Rights. Issues of contemporary concern including cases of local courts and of the Supreme Court and their implications for law in general and society at large.

3 Class Hours

### LAW 240
**Corporate Law (1)**

Types, uses and organization of the corporation, antitrust and securities law, mergers and consolidation, liquidation and dissolution.

1 Class Hour - 5 Week Session.

### LAW 250
**Municipal Law (1)**

Structure and operations of local government in New York State. Evolution of local government in New York during the first two centuries of its existence. Laws, ordinances, and operations.

1 Class Hour - 5 Week Session.

### LAW 251
**Federal Civil Procedure (1)**

Federal court system, rules of civil procedure including pleading, motions, depositions, litigation procedures and the role of the paralegal.

3 Class Hours - 5 Week Session.

### LAW 252
**Applied Real Estate (1)**

Role of the paralegal in Real Estate transactions including agreements, abstracts, preparation of documents, contracts, and closing procedures. Students conduct a "mock" real estate transaction.

3 Class hours - 5 Week Session.

### LAW 253
**Computers in the Law Office (1)**

Computer applications including hardware and software, financial management, word processing, real estate practice packages, computerized research, litigation support, and document management.

3 Class Hours - 5 Week Session.

### LAW 260
**Labor-Management Relations (Labor Law) (1)**

Labor-management relations in the public and private sectors. Taft-Hartley Act, National Labor Relations Act and Wagner Act, unfair labor practices, labor contracts, arbitration and mediation, availability of injunctions in labor disputes.

1 Class Hour - 5 Week Session.

### LAW 270
**Vehicle and Traffic Law (1)**

Regulations of traffic within the state of New York. Emphasis on violations and traffic-related misdemeanors resulting from violation of the rules of the road and court proceedings resulting therefrom.

1 Class Hour - 5 Week Session.

### LAW 280
**Litigation and Trial Preparation (1)**

Intake procedure, systems and analysis, concepts of jurisdiction and venue, parties to an action, pleadings, pre-trial procedures, motions and special practice, special proceedings, trials, judgments and appeals.

1 Class Hour - 5 Week Session.

### LAW 290
**Landlord-Tenant Relations (1)**

Problems faced by landlords and tenants, private housing, live-in arrangements, covenants, leases, warranties. Tenant and landlord rights and obligations.

1 Class Hour - 5 Week Session.

### LAW 295
**Paralegal Practicum (4)**

Designed for students without previous exposure to the legal field to observe and study operations, policies, and procedures performed by paralegals in various settings, (private firms, public agencies, commercial corporations, etc.). Emphasis on attorneys and paralegals interaction and paralegal relations with areas outside the office (clients, municipal agencies, other firms, commercial institutions, other legal agencies, etc.). Final report integrating the practical and theoretical aspects of their experiences.

**2 Class Hours and 4 Laboratory Hours; Prerequisites: 30 credits of counseled coursework, at least 12 of which must be in PLA credits or permission of department chairperson.**

### LAW 299
**Independent Study: Paralegal (1-3)**

An individual student project in paralegal studies which is beyond the scope or requirements of the courses offered by the program. Conducted under the direction of a faculty member or attorney, and approved by the program coordinator.

**Prerequisite: PLA Survey of Paralegalism plus three additional hours in a 200 level PLA course.**

## LITERATURE

**All Literature Courses are "W" Courses.**

**English 110 College Writing I is the Prerequisite for all Literature Courses.**

### LIT 200
**Introduction to Literature (3)**

In this course students will read works representing different literary genres, learn different approaches to their interpretation, and practice the process of literary analysis in oral and written forms.

3 Class Hours

### LIT 210
**Studies in United States Literature I (3)**

A study of United States literature from Pre-Colonial times through the 19th century, exploring recurrent themes and motifs in the works of both newly discovered and long-recognized authors. Emphasis on engaging student curiosity, eliciting student response, and fostering student development of critical analysis and interpretation through close reading of texts, class discussion, and formal and informal writing assignments.

**3 Class Hours; Prerequisite: ENG 110 College Writing I.**

### LIT 211
**Studies in United States Literature II (3)**

A study of United States literature from the late 19th century to the present, exploring recurrent themes and motifs in the works of both newly discovered and long-recognized authors. Emphasis on engaging student curiosity, eliciting student response, and fostering student development of critical analysis and interpretation through close reading of texts, class discussion, and formal and informal writing assignments.

**3 Class Hours; Prerequisite: ENG 110 College Writing I.**

### LIT 214
**Studies in British Literature I (3)**

History and development of British literature from the Middle Ages to the 18th century. Selections of literary merit from prose, drama, poetry.

**3 Class Hours; Prerequisite: ENG 110 College Writing I.**

### LIT 215
**Studies in British Literature II (3)**

History and development of British literature from the beginning of the 18th century to the middle of the 20th. Selections of literary merit from prose, poetry, drama.

**3 Class Hours; Prerequisite: ENG 110 College Writing I.**

### LIT 220
**The Short Story (3)**

Close reading and analysis of stories produced in different times and places. Attention to the relationships among author, text, reader, and context in the making of meaning.

**3 Class Hours; Prerequisite: ENG 110 College Writing I.**

### LIT 225
**United States Latino Literature (3)**

A literary overview of contemporary United States Latino/Latina literature. The course will focus on short stories, essays, poems, and films produced by this influential, fastest-growing cultural group. Works will explore themes of gender, sexuality, class, race, and color within the context of the cross-cultural American experience.

**3 Class Hours; Prerequisite: ENG 110 College Writing I**

### LIT 230
**American Drama (3)**

A survey of American drama. Examination of dramatic theories and techniques, and consideration of historic and thematic problems in American drama.

**3 Class Hours; Prerequisite: ENG 110 College Writing I.**

### LIT 233
**World Drama (3)**

A survey of world drama produced in both Western and non-Western cultures. Examination of dramatic theories and techniques, and consideration of dramatic themes common to diverse cultures.

**3 Class Hours; Prerequisite: ENG 110 College Writing I.**

### LIT 235
**Shakespeare (3)**

Shakespeare as both dramatist and poet. Emphasis on selected comedies, histories and tragedies. Consideration of the playwright's life and times.

**3 Class Hours; Prerequisite: ENG 110 College Writing I.**

### LIT 240
**The Poetic Experience: Sight and Sound (3)**

This course exposes students to poetry from different countries and cultures, to important aspects of poetic language, and to diverse poetic forms. Students will read, discuss, and write about poetry, and strive to understand what poetry portrays of human experience. Students will also write poems about their own experience. In doing so, students will learn how poems are built or structured.

**3 Class Hours; Prerequisite: ENG 110 College Writing I.**

### LIT 250
**Women and Literature: Other Perspectives (3)**

Critical analysis and evaluation of literary works by and about women produced in diverse socio-political contexts. Emphasis upon the relationship between the text and its cultural setting and upon other, non-traditional critical perspectives, including feminist perspectives.

**3 Class Hours; Prerequisite: ENG 110 College Writing I.**

### LIT 253
**Psychological Investigation in Literature (3)**

The application of Jungian, Freudian, and other psychological theories and insights to selected short stories, novels, and poems to promote more penetrating appreciation of characters' motivations and actions and the literary work in general.

**3 Class Hours; Prerequisite: ENG 110 College Writing I.**

### LIT 260
**Detective Fiction (3)**

A critical study of one of the most popular literary forms of our time, designed for armchair detectives. Starting with Poe, Conan Doyle (Sherlock Holmes), and other classics in the field, the course traces the development of the detective story from its puzzle-solving beginnings to the modern psychological novel of crime and detection.

**3 Class Hours; Prerequisite: ENG 110 College Writing I.**

### LIT 263
**Children's Literature (3)**

Close reading and analysis of a diverse selection of literature written for children including short fiction, novel, and poetry. Emphasis on the use of critical theories in investigating diverse interpretations of the texts and in exploring revelatory connections between the literature and contemporary human experience.

**3 Class Hours; Prerequisite: ENG 110 College Writing I**

### LIT 264
**World Folktales: The Art of Storytelling (3)**

Reading, analyzing, discussing, adapting, and retelling selected multicultural folktales transcribed from the oral tradition. Emphasis on the importance of motifs, narrative structure, recurring global themes, cultural and ethnic specificity, as well as the morphology of the tales. Identification of cross-cultural story techniques will build the story repertoire; diverse oral performance techniques will enhance motif and character analysis.

**3 Class Hours; Prerequisite: ENG 110 College Writing I**

### LIT 267
**An Introduction to Science Fiction (3)**

This course will survey science fiction works from various genres such as poetry, the novel, and the short story. It will provide students with a historical overview of the field of science fiction by exposing them, through readings and lectures, to works from the 19th and 20th centuries. Titles chosen will reflect their importance in the literary development of science fiction over the last two centuries. The essence of the course will consist of close readings and analyses of the texts for their artistic qualities as well as their representations of social trends and ideas. Students will learn how to do research on the Internet, as it is one of the foremost domains of current cyber fiction. One section of the course will deal with the history of science fiction in the cinema. Students will come away from the course with an understanding of hard science fiction, utopias and dystopias, cyber fiction, the pulps, fantasy fiction, the Golden Age, and speculative fiction.

**3 Class Hours; Prerequisite: ENG 110 College Writing I.**

### LIT 274
**Introduction to African American Literature (3)**

This survey course will introduce students to African American literature from Colonial America to the present. Various genres, representative works, and major writers will be examined in terms of development, theme, structure, and context. This will be a study of African American literature as both artistic and cultural expression.

**3 Class Hours; Prerequisite: ENG 110 College Writing I.**

### LIT 276
**Native American Literature (3)**

A survey of the literature of selected Native American tribes in distinct geographical areas of what is now known as the United States (focusing on the Northeast, Southeast, Plains, and Southwest). Critical reading of traditional and contemporary works, with emphasis upon translated myths, legends, and songs handed down through the oral tradition. An examination of how Native American oral tradition, myth, and genre challenge "Western" notions of "literature." Investigation of the texts as both artistic and cultural expression.

**3 Class Hours; Prerequisite: ENG 110 College Writing I.**

### LIT 277
**Introduction to Irish Literature (3)**

A survey of Irish literature in several genres—novels, short stories, poetry, drama, essays, and criticism—from the nineteenth century to the present. Students will read and critically analyze the work of major figures, such as Maria Edgeworth, W.B. Yeats, James Joyce, and Seamus Heaney, and of figures who are less well-known. Close attention will be paid to the ways in which Irish literary works respond to the pressures of Irish history and culture. A research paper is required.

**3 Class Hours; Prerequisite: ENG 110 College Writing I.**

### LIT 280
**The Short Novel (3)**

An introductory course on the novel, focusing on shorter exemplars of the genre written in English

since 1850. Emphasis on narrative technique, religious and philosophical ideology, as well as socio-psychological themes. Students will demonstrate achievement through various writing and speaking activities and assignments.

**3 Class Hours; Prerequisite: ENG 110 College Writing I**

### LIT 290
**Banned Books (3)**

This course will survey literary works from several genres, including drama, novels, poems, and stories that have been censored or banned at one time and may still be prohibited in some places. The titles will be chosen for their importance to the study and interpretation of literature and to censorship history. Emphasis will be placed on close reading of the texts and on research into the artistic, political, and social reasons for their censorship. Some of the reading material will come from free Internet sources such as The Gutenberg Project and Banned Books Online.

**3 Class Hours; Prerequisite: ENG 110 College Writing I.**

### LIT 295
**Literature and Film (3)**

Introduces students to literary and cultural inquiry through exploration of the compositional and aesthetic relationships between fiction and film. Analysis of various literary texts (predominantly, novels) as well as films based on those texts will lead to significant discoveries concerning fundamental differences between the two genre and – perhaps, most importantly – the transactional dynamics that exist between audience and image, reader and word.

**3 Class Hours; Prerequisite: ENG 110 College Writing I**

## LEARNING SKILLS

### LRS 101
**Study Management (1/2)**

General principles of academic success, relationship of outside work and study, scheduling and organizing time, study and concentration, learning style evaluation. Students will construct a working study schedule.

**3 Class Hours for 3 Weeks**

### LRS 102
**Memory and Exams (1/2)**

Theories of memory. Methods of review, strategies for taking essay and objective examinations dealing with test anxiety.

**3 Class Hours for 3 Weeks**

### LRS 103
**Textbook Mastery (1/2)**

Use of college textbooks as study aids, principles of effective text reading, text study systems. Extensive application of these principles in the student's own textbook.

**3 Class Hours for 3 Weeks**

### LRS 104
**Listening and Notetaking (1/2)**

Examination of organizational patterns as they exist in oral communication. Exploration of systems on notetaking, and application of systems to student's own lectures and notes.

**3 Class Hours for 3 Weeks**

### LRS 105
**Learning Skills (2)**

Principles and techniques of academic success. Focus will be on classroom skills such as text reading and notetaking skills. time management and exam taking strategies also will be covered. All techniques will be directly applied in the students' content courses.

**3 Class Hours for 12 Weeks; course starts at the beginning of the third week of the semester; Corequisite: Students should be enrolled in a credit-bearing course which includes a textbook.**

Note: Students may not receive credit toward graduation requirements from LRS 101/102/103/104/106 if they use LRS 105.

### LRS 106
**College Success (3)**

The goal of this course is to help students to become more aware, active, and capable learners. Emphasis will be on a core of specific study strategies based on learning theory, such as reading academic texts, making notes from texts and lectures, managing study time effectively, and taking exams successfully. Students will apply these strategies to their own courses.

Note: Students may not receive credit for LRS 101/102/103/104/105 if they receive credit for LRS 106 to fulfill graduation requirements.

### LRS 110
**The Research Paper (1)**

Shaping the Paper: Development of a topic, location of appropriate resources and digestion of the material. Writing the Paper: Outlining effective composition and proper form. A hands-on approach in which students actually research a topic and compose a term paper.

**2 Class Hours for 8 Weeks; Course starts at the beginning of the fifth week of semester.**

### LRS 120
**The Art of Thinking (1)**

Logic as an art. Logical principles taught in imaginative ways to achieve understanding. Emphasis on the practice of reasoning. Fundamental logic rules are taught as tools to enable the students to gain experience and confidence in thinking about issues that are important to them.

**2 Class Hours for 8 Weeks; Course starts at the beginning of the fourth week of the semester.**

### LRS 130
**Introduction to Microcomputers and Word Processing (2)**

Introduction to all aspects of the microcomputer through lecture and practice. Students will master at least one word processing package, as well as gain familiarity with both a graphics and a spreadsheet package. This course is intended for students who have no prior knowledge of microcomputers.

**3 Class Hours for 10 Weeks; Course starts at the beginning of the fifth week of the semester.**

### LRS 150
**Advanced Learning Skills (3)**

An intensive course in the examination and exploration of the learning process. Students will synthesize their knowledge, understanding, and appreciation of the learning process to plan, implement and evaluate their own peer tutoring. Emphasis on workshopping and collaborative learning. Intended for tutors, Supplemental Instruction Leaders, and students considering a career in education.

**3 Class Hours; Prerequisite: Department Chair Interview and Approval.**

## MATHEMATICS

### MAT 090
**Foundations for College Mathematics I (0)**

Arithmetic of whole numbers, fractions, decimals and signed numbers. Percent, ratio and proportion. Measurement, metric units and basic geometric concepts. Language of algebra and solving simple equations. Descriptive statistics. Estimation, problem solving, critical thinking, writing and communication skills are developed in group activities. This course is designed to provide the skills necessary for students to successfully complete MAT 092, MAT 113, MAT 114.

**4 Class Hours**

### MAT 092
**Foundations for College Mathematics II (0)**

Signed numbers, exponents and equations in one variable. Evaluating formulas and algebraic expressions. Factoring and the distributive property. Graphing, solving linear equations and inequalities in two variables, area and applications. Estimation, problem solving, critical thinking, writing, and communication skills are developed in group activities.

**4 Class Hours; Prerequisite: MAT 090 Foundations for College Mathematics I or equivalent.**

### MAT 095
**Metric Conversion and Dosages (0)**

Common fractions and decimal fractions. Metric computations. Apothecary and household systems. Conversions of metric, apothecaries and household units. Calculations of dosage. Designed to meet the mathematics proficiency required for clinical nursing course.

**1 Class Hour; Prerequisite: MAT 092 Foundations for College Mathematics II or equivalent and Placement by the Nursing Department.**

### MAT 096
**Elementary Algebra and Trigonometry (0)**

Rational exponents; polynomials; factoring; functions; rational expressions; linear, quadratic and rational equations; graphs of basic functions; linear systems; topics in geometry; right triangle trigonometry.

**5 Class Hours; Prerequisite: MAT 092 Foundations for College Mathematics II or equivalent.**

### MAT 097
**Intravenous Medications and Pediatric Dosage (0)**

Calculations of intravenous medications, calculations involving drop factors, flow rate and infusion time. Calculations of pediatric dosage in divided dosages and dosages based on body weight. Calculation of minimum fluid requirements. Designed to meet the mathematics proficiency required for second year nursing program.

**1 Class Hour; Prerequisite: MAT 092 Foundations for College Mathematics II or equivalent and Placement by Nursing department.**

### MAT 103
**Introduction to the T185 and T186 Calculators (.5)**

A hands-on short course covering basic graphing, storing and solving of equations, various mathematical and statistical operations, conversions, vector and complex arithmetic, and the "Custom" menu. Students will link with other 85's and 86's, and to a desktop PC, and be able to get printouts of assignments. The course emphasis will change as the department adopts more advanced calculators in the future.

**1.25 Class Hours for 5 weeks.**

### MAT 113
**Mathematical Explorations I (3)**

This course is an interdisciplinary approach to topics in mathematics using computer technology. Topics include: Statistical Analysis of Data, Financial Management, Network Analysis, Project Design and

Voting Theory. This course is designed for Liberal Arts and Business Students, not for Science majors.

**3 Class Hours; Prerequisite: MAT 090 Foundations for College Mathematics I or equivalent.**

### MAT 114
**Mathematical Explorations II (3)**

This course is an interdisciplinary approach to topics in mathematics using computer technology. Topics include: Numbers in the Real World, Exponential Growth, Mathematics and the Arts, Fundamentals of Geometry, and Practical Geometry. This course is designed for Liberal Arts and Business Students, not for Science majors.

**3 Class Hours; Prerequisite: MAT 090 Foundations for College Mathematics I or equivalent.**

### MAT 117
**Elementary Finite Math w/Algebra (4)**

Sets, probability, matrix algebra, graphing, inequalities, linear programming, permutations and combinations, linear models of equilibrium, systems of linear equations, solving equations and inequalities.

**4 Class Hours; Prerequisite: MAT 092 Foundations for College Mathematics II or equivalent.**

### MAT 119
**Mathematics for Elementary Education I (3)**

An exploration of order of operations, fractions, equations of a single variable, graphing lines; visual display of data using charts and graphs, descriptive statistics, data analysis, hypothesis testing; area and perimeter of plane figures, volume and surface area of solids. Students are expected to explain the material as though to a target audience. Course uses a project-based instruction methodology. Intended only for elementary education majors, this course is the first course in a two course sequence (with MAT 120) for completion of SUNY General Education Math requirement.

**3 Class Hours; Prerequisite: MAT 092 Foundations for College Math II**

### MAT 120
**Mathematics for Elementary Education II (3)**

Simple probability, odds, expected value; patterns, symmetry, tilings, sequences, and pattern block manipulation; functions of one or more variables with graphs and applications; right triangle trigonometry; sine, logarithmic, exponential, quadratic and logistic curves. Students are expected to explain the material as though to a target audience. Course uses a project-based instruction methodology. Intended only for elementary education majors, this course is the second course in a two course sequence (with MAT 119) for completion of SUNY General Education Math requirement. (Writing Emphasis Course)

**3 Class Hours; Prerequisite: MAT 119 Mathematics for Elementary Education I and ENG 110 College Writing I**

### MAT 124
**Statistics I (3)**

(Available in ASL mode)

Sampling theory, organization and presentation of data, measures of central tendency, varience, standard deviation, exploratory data analysis, correlation and regression, normal distribution, student's t-distribution, statistical inference, hypothesis testing, confidence intervals, use of a statistical software package. Approved for SUNY General Education Mathematics requirement.

**3 Class Hours; Prerequisite: MAT 096 Elementary Algebra and Trigonometry or equivalent.**

### MAT 130
**Applied Algebra and Trigonometry (4)**

Designed for students in the Engineering Technologies only, the course covers algebra and trigonometry emphasizing computational skills and graphing using application problems from technology fields. Topics include: function definition, graphs, exponents, logarithms, trigonometric identities, complex numbers and vectors.

**4 Class Hours; Prerequisite: MAT 096 Elementary Algebra and Trigonometry or equivalent.**

### MAT 136
**College Algebra and Trigonometry (4)**

Rational exponents; polynomial long division; rational expressions; completing the square; circles; complex numbers; quadratic formula; linear systems; inverse functions; graphs and properties of logarithms and exponential functions; reference angles; radian measure; graphs of sine, cosine, and tangent; basic trigonometric identities and equations.

**4 Class Hours; Prerequisite: MAT 096 Elementary Algebra and Trigonometry or equivalent.**

### MAT 145
**Finite Mathematics (3)**

Matrices, matrix operations, solving systems of equations using matrices, simplex method, probability, game theory, graph theory, and networks. (Students may not use both MAT 145 and MAT 117 to meet graduation requirements.)

**3 Class Hours; Prerequisite: MAT 136 College Algebra and Trigonometry or equivalent.**

### MAT 146
**Introduction to Calculus (3)**

Analytic geometry of lines and parabolas; functions and their graphs; limits and continuity; differentiation rules and applications; integration techniques and applications; exponential and logarithmic functions and applications. Recommended for Social Science, Health Science and Business students. Not for Mathematics majors or Science majors in the A.S. degree program.

**3 Class Hours; Prerequisite: MAT 136 College Algebra and Trigonometry or equivalent.**

### MAT 148
**Applied Technical Mathematics - IS (4)**

The first course in a two-semester sequence of intermediate algebra and trigonometry with technical applications. Topics included are: the trigonometric functions, vectors, units of measurement and approximate numbers, fundamental concepts of algebra, functions, and graphs, systems of linear equations, determinants, factoring and fractions, quadratics, variation and geometry, (areas and perimeters of common plane figures, volumes and surface areas of common solids). The scientific calculator will be used throughout the course. This course applies to industry specific degree programs only.

**4 Class Hours; Prerequisite: MAT 096 Elementary Algebra and Trigonometry.**

### MAT 149
**Applied Technical Mathematics - IS (4)**

The second course in a two-semester sequence of intermediate algebra and trigonometry with technical applications. Topics included are: trigonometric functions of any angle, oblique triangle, graphs of trigonometric functions, exponents and radicals, exponential and log functions, basic operations with complex numbers, inequalities, introduction to statistics. The scientific calculator will be used throughout the course. This course applies to industry specific degree programs only.

**4 Class Hours; Prerequisite: MAT 148 Applied Technical Mathematics I or equivalent.**

### MAT 156
**Algebra and Trigonometry for Calculus (4)**

Real exponents; nonlinear and absolute value inequalities; graphs of rational functions; logarithmic and exponential equations; conic sections; determinants; general systems of equations; trigonometric and inverse trigonometric functions and graphs; trigonometric identities, equations, and inequalities; DeMoivre's Theorem, law of sines, law of cosines.

**4 Class Hours; Prerequisite: MAT 136 College Algebra and Trigonometry or equivalent.**

### MAT 160
**Applied Calculus I (4)**

Designed for students in the Engineering Technologies only, this course covers the mechanics of calculus using application problems from technology fields. Topics include: equations of tangent lines; limits; differentiation and integration of algebraic, logarithmic, exponential, and trigonometric functions; product rule, quotient rule, and chain rule; implicit differentiation; related rates; maxima and minima; differentials; the definite integral and applications to finding area, center of gravity, volume of revolution and work done; numerical integration.

**4 Class Hours; Prerequisite: MAT 130 Applied Algebra and Trigonometry**

### MAT 181/171
**Calculus I (4)**

(Available in ASL mode)

A university parallel calculus course covering functions, limits and continuity. Differentiation and integration of polynomial, rational, trigonometric, logarithmic, exponential, and inverse trigonometric functions using computational, intuitive and technology assisted methods. Applications including curve sketching, rectilinear motion, related rates, maxima and minima. Summation, integration and the Fundamental Theorem of Calculus. Emphasis will be placed on analyzing problems using technology assisted methods.

**4 Class Hours; Prerequisite: MAT 156 Algebra & Trigonometry for Calculus or equivalent.**

**Note:** Students may not use more than one of the following to meet graduation requirements: MAT 146, MAT 160, MAT 181.

### MAT 182/172
**Calculus II (4)**

(Available in ASL mode)

Applications of the definite integral including area, volume, and arc length. Techniques of integration including parts, partial fractions and trigonometric substitution. Improper integrals, detecting convergence and L'Hospital's rule. Sequences and infinite series, tests for convergence, power series, Maclaurin series and Taylor series. Polar curves and calculus in polar coordinates. Parametric equations in calculus.

**4 Class Hours; Prerequisite: MAT 181 Calculus I.**

* ASL mode courses are available through the Internet.

### MAT 224
**Statistics II** **(3)**

Review of probability fundamentals, discrete random variables and probability distributions. Continuous random variables and probability distributions, joint probability distributions and random samples, hypothesis testing, analysis of variance, multifactor analysis of variance, linear regression and correlation, nonlinear and multiple regression, the analysis of categorical data and non-parametric procedures, use of statistical software package.

**3 Class Hours; Prerequisite: MAT 124 Statistics I.**

### MAT 245
**Design of Experiments** **(3)**

This course is an introduction to the most common types of statistical designs and analyses of experiments. Topics include single-factor experiments with randomized blocks, Latin squares, incomplete blocks, two-factor experiments, 2k and 3k designs with confounding, fractional designs, and other selected topics.

**3 Class Hours; Prerequisite: MAT 224 Statistics II.**

### MAT 250
**Discrete Mathematics** **(4)**

Sets, functions, mathematical induction, relations, partially ordered sets, combinatorics including permutations, the pigeonhole principle, binomial and multinomial coefficients, recurrence relations, generating functions, the principle of inclusion-exclusion. Graph theory, including paths and connectedness, minimum length paths, Eulerian and Hamiltonian graphs, graph isomorphisms, trees, planar and nonplanar graphs.

**4 Class Hours; Prerequisite: MAT 182 Calculus II.**

### MAT 260
**Applied Probability and Statistics** **(4)**

Descriptive statistics, probability and random variables, discrete and continuous probability distributions, sampling distributions, confidence interval estimates, hypothesis tests, linear regression analysis, control charts for variables and attributes, factorial and fractional factorial designed experiments, all with a strong emphasis on engineering applications and the use of statistical software to simulate, model, and analyze data.

**4 Class Hours; Prerequisite: MAT 182 Calculus II.**

### MAT 264
**Linear Algebra** **(4)**

Linear equations and matrices, vector spaces, inner product spaces, linear independence, linear transformations. Determinants and Cramer's rule, systems of homogeneous equations, Gram-Schmidt process and diagonalization. Eigenvalues and eigenvectors and applications.

**4 Class Hours; Prerequisite: MAT 182 Calculus II.**

### MAT 266
**Introduction to Higher Math** **(3)**

This course provides a rigorous introduction to the concepts of sets, functions, sequences and series. Emphasis will be placed on writing mathematics clearly and concisely. Recommended for Mathematics majors or Computer Science and Engineering Science students as advised.

**3 Class Hours; Prerequisite: MAT 182 Calculus II or permission of the instructor.**

### MAT 281
**Calculus III** **(4)**

Triple integrals with cylindrical and spherical coordinates. Vector geometry and vector calculus in two and three dimensions. Calculus of multivariable functions: gradient, extrema and optimization (with and without constraints). Line and surface integrals. Green's theorem and Stokes' theorem.

**4 Class Hours; Prerequisite: MAT 182 Calculus II.**

### MAT 282
**Differential Equations w/Linear Algebra** **(4)**

First and second order differential equations. Matrices, determinants, eigenvalues and eigenvectors, and systems of linear equations. Linear independence, the Wronskian, and differential operators. Homogeneous and nonhomogeneous linear differential equations with constant coefficients. Methods of undetermined coefficients, and variation of parameters. Systems of linear differential equations, Laplace transforms, and power series solutions.

**4 Class Hours; Prerequisite: MAT 182 Calculus II.**

### MAT 299
**Independent Study** **(1-4)**

The student undertakes an independent project in his/her specialty under the guidance of a faculty member. Only one independent study course allowed per semester. Consideration may be given a project involving work assignment.

**Prerequisite: Department Chairperson Permission.**

## MEDICAL ASSISTANT

### MDA 102
**Medical Assisting Science** **(2)**

Introduction to the profession of medical assisting. Qualifications and duties, professional affiliation, history of medicine, ethics and professionalism, the role of the medical assistant in the physician's office. Interactions with patients and staff.

**2 Class Hours**

### MDA 104
**Keyboarding and Medical Word Processing** **(3)**

Introduction to and development of basic keyboarding skills on typewriters and computer keyboards and introduction to word processing. Students will have the opportunity to learn keyboarding and word processing functions and apply that knowledge with hands-on development of skills. Emphasis will be on application to medical correspondence, reports, and chart notes.

**3 Class Hours; Prerequisite: BIO 131 Human Biology and HIT 106 taken concurrently or consent of instructor.**

### MDA 106/HIT 107
**Medical Transcription and Correspondence** **(4)**

Introductory course in computers with emphasis on Word Processing. Development of correspondence and medical reports on the computer using dictaphones. Fundamentals of transcription, speed building and accuracy using medical terminology.

**2 Class Hours, 4 Laboratory Hours; Prerequisite: HIT 106 Medical Terminology I and MDA 104 Keyboarding or consent of the instructor.**

### MDA 114
**Standard First Aid Management of Emergencies** **(1)**

The causes, care and prevention of accident/emergency lifesaving situations. Mastery level of learning for the proficiency of basic skills. Certification by National Safety Council. Recognizing, managing and aiding the physician in medical emergencies and maintaining emergency supplies.

**2 Laboratory Hours**

### MDA 115
**Medical Assisting Procedures I** **(4)**

Basic clinical procedures of medical assisting in the physician's office. Use and management of diagnostic instruments and equipment. Related patient care, professional ethics, medical terminology nomenclature. For Medical Assisting students.

**3 Class Hours, 2 Laboratory Hours; Prerequisite: HIT 106 Medical Terminology and MDA 102 Medical Assisting Science or consent of instructor.**

### MDA 201
**Medical Assisting Procedures II** **(4)**

Introduction to basic microbiology, hematology and urinalysis. Collection, preparation and testing of blood, urine and body fluids. Significance of laboratory analysis. For Medical Assisting students.

**2 Class Hours, 4 Laboratory Hours; Prerequisite: MDA 115. Pre-corequisite: BIO 132 Human Biology II.**

### MDA 206
**Medical Office Management** **(4)**

Medical office administrative procedures, such as bookkeeping principles and practices, patient health records, insurance forms, banking and postal services, payroll records, patient accounts, office machines. Mechanics of applicable medical correspondence. Appointment scheduling, supplies and inventory. Emphasis on practical application of administrative techniques. For Medical Assisting students.

**3 Class Hours, 2 Laboratory Hours; Prerequisites: MDA 102 Medical Assisting Science and MDA 104 Keyboarding and Medical Word Processing.**

### MDA 207
**Advanced Medical Office Management** **(4)**

Accounting, payroll and bookkeeping procedures. Computerized applications for payroll. Banking, spreadsheets and reconciliations of bank statements. Use of Peg Board/Write It Once System integrated with the accounting objectives. Preparation of Internal Revenue deposits, records, and year-end reports for the Medical Office. For Medical Assisting students only.

**3 Class Hours, 2 laboratory Hours; Prerequisites: MDA 102 Medical Assisting Science.**

### MDA 208
**Medical Ethics, Law and Economics** **(3)**

Emphasizing the medical ethics which set the standards of conduct for physicians, as well as guidelines for medical assistants. Requirements to practice medicine, legal liabilities of the profession, and the importance of medicolegal consent forms. Legal arrangements of private medical practices, medical care financing, and systems of health care delivery.

**3 Class Hours**

### MDA 210
**Pharmacology (2)**

A practical course relevant to health science courses. Emphasizes knowledge of prescriptions and prescription writing. Basic principles of mathematics in pharmacy. Drugs governed by U.S.P. standards which are in common use and the generic-pharmaceutical relationship. Drug grouping action in relation to human physiology.

**2 Class Hours; Prerequisite: BIO 131 Human Biology I or consent of instructor.**

### MDA 211
**Medical Assisting Procedures III (4)**

Advanced technical procedures in medical assisting specifically oriented to the various medical specialties. Techniques of electrocardiography, audiometry and physical therapy. Field trips and practical experiences give additional background outside of the classroom.

**3 Class Hours, 2 Laboratory Hours; Prerequisite: For Medical Assisting Students. BIO 132 Human Biology, MDA 115, Medical Assisting Procedures I and II MDA 201.**

### MDA 245
**Directed Practice Seminar (1)**

Integration of theoretical knowledge and practical experience as an extern in physician's offices, medical centers, school health departments, rehabilitation clinics, and other health care facilities. For senior Medical Assisting students who have a 2.0 overall average.

**1 Class Hour; Prerequisites; MDA 206 Medical Office Management and MDA 201 Medical Assisting Procedures II. MDA 211 Medical Assisting Procedures III and MDA 210 Pharmacology must be taken previously or concurrently.**

### MDA 246
**Clinical Practicum I (4)**

Directed practical experience in fundamental medical assisting procedures as an extern in physician's offices, medical centers, school health departments, rehabilitation clinics, and other health care facilities. For senior Medical Assisting students.

**120 Clinical Hours over 7.5 weeks; Corequisite: MDA 245 Directed Practice Seminar.**

### MDA 247
**Clinical Practicum II (4)**

Directed practical experience for development of competency in medical assisting procedures as an extern in physician's offices, medical centers, school health departments, rehabilitation clinics, and other health care facilities. For senior Medical Assisting students.

**120 Clinical Hours over 7.5 weeks; Corequisite: MDA 245 Directed Practice Seminar.**

## MECHANICAL ENGINEERING

### MET 112
**Metrology (2)**

The study of the science of measurement. Accuracy, precision and reliability compared. Standards, including surface finish. Students learn to use the steel rule, calipers, micrometers, fixed gauges, feeler gauges, radius gauges, gauge blocks and surface plates, height and planer gauges, V-blocks, toolmaker's flat, mechanical indicating equipment, visual guage, air gauges, toolmaker's microscope, optical flats and angle measuring equipment. Calibration of instruments and appropriate recordkeeping.

**3 Class Hours; Prerequisite: MAT 124 Statistics I or MAT 096 Elementary Algebra and Trigonometry.**

### MET 113
**Engineering Drawing I w/CAD (2)**

An introductory course in the fundamentals of engineering drawing and the basics of Computer Aided Drawing (CAD). Manual drafting techniques are integrated with extensive use of AutoCAD. Topics include use of the drawing instruments, geometric construction, orthographic projection, technical sketching, sectional and auxiliary views and proper dimensioning techniques. Students will gain an understanding of engineering drawing concepts by applying them in both manual drafting and AutoCAD assignments.

**1 Class Hour, 3 Laboratory Hours.**

### MET 116
**Engineering Drawing II w/CAD (3)**

A second course in engineering drawing emphasizing the principles of descriptive geometry, working drawings, tolerancing methods, geometric dimensioning and tolerancing with an introduction to CADKEY, or other CAD software.

**2 Class Hours, 3 Laboratory Hours; Prerequisite: MET 113 Engineering Drawing I w/CAD.**

### MET 120
**Machining Processes (3)**

The study of machining materials and processes. Topics include cutting tool materials and cutting fluids, electrical discharge machining, properties of materials, drilling and related hole making processes, screw thread systems and their measurements, indexing, gear terminology and manufacturing methods, tapers and taper calculations. Laboratory exercises provide an opportunity for actual practice in the operation of selected machine tools.

**2 Class Hours, 2 Laboratory Hours.**

### MET 121
**Manufacturing Processes I (2)**

A basic study of manufacturing materials and processes, such as cutting-tool materials and cutting fluids, electrical discharge machining, properties of materials, drilling and related hole making processes, joining processes and equipment, producing and processing ferrous and non-ferrous metals. Laboratory exercises provide an opportunity for actual practice in the operation of selected manufacturing equipment.

**1 Class Hour, 3 Laboratory Hours.**

### MET 122
**Manufacturing Processes II (3)**

A continuation of the basic study of manufacturing processes. The nature of metals and alloys, heat treatment, various casting processes and the processing of metals by hot and cold working techniques. Special topics include screw thread systems and their measurement, indexing, gear terminology and manufacturing methods, tapers and Computer Numerical Controlled machining. Laboratory exercises parallel classroom topics and will provide the students with an opportunity to practice some of these manufacturing methods.

**2 Class Hours, 3 Laboratory Hours; Prerequisite: MET 121 Manufacturing Processes I.**

### MET 127
**Applied Manufacturing Processes I – IS (4)**

A basic study of manufacturing materials and processes, such as: cutting-tool materials and cutting fluids, electrical discharge machining, properties of materials, drilling and related hole making processes, joining processes and equipment, producing and processing ferrous and non-ferrous metals. The nature of metals and alloys, heat treatment, gear terminology and manufacturing methods, various processes and the processing of metals by hot and cold working techniques. Laboratory exercises will provide an opportunity for actual practice in the operation of selected manufacturing equipment.

**4 Class Hours**

### MET 128
**Applied Manufacturing Processes II – IS (4)**

A continuation of Applied Manufacturing Processes I: Basic study of manufacturing materials and processes, such as: properties of materials, heat treatment, and the processing of non-metals. Study of the structure, general properties, and applications of polymers, ceramics, composite materials; forming and shaping plastics and composite materials; abrasive machining and finishing; non-traditional machining processes; tribology, surface treatment, coating and cleaning; fabrication of microelectronic devices; engineering metrology and instrumentation, quality assurance, testing, and inspection; safety and product liability concerns. Laboratory exercises will provide an opportunity for actual practice in the operation of selected manufacturing equipment.

**4 Class Hours; Prerequisite: MET 127 Applied Manufacturing Processes I.**

### MET 134
**Statics (3)**

Static force systems and equilibrium, free body diagrams, trusses, graphic statics, spatial force systems, friction, centroids, Moment of Inertia.

**3 Class Hours; Prerequisite: MAT 130 Applied Algebra and Trigonometry.**

### MET 142
**Mechanical Drawing II w/CAD (2)**

A continued study in engineering drawing with an introduction to CADKEY. Selected topics to include assembly drawings, fits and tolerances, geometric dimensioning and tolerancing along with an introduction to CADKEY, or other CAD software.

**1 Class Hour, 2 Laboratory Hours; Prerequisite: MET 113 Engineering Drawing I w/CAD.**

### MET 164
**Quality Systems (2)**

The total Quality Concept including organizational budgeting, planning, monitoring and continuous improvement of the Quality Function in a business environment. The planning process including: defining the process, customer needs, process measurements, analyzing data and the design or re-design of the process. Topics to include the basic concepts of statistics and Total Quality Assurance.

**1 Class Hour, 3 Laboratory Hours; Prerequisite: MAT 096 Elementary Algebra and Trigonometry**

### MET 200
**Senior Seminar (0)**

Guest speakers, industry tours, videos, and special projects intended to make the student aware of the latest developments in the field of Mechanical Engineering Technology. Topics will include Operations Management, Ethics in Engineering, Survival Skills for Graduates, etc.

**2 Laboratory Hours; Prerequisite: ENG 110 College Writing I and Program Chairperson approval.**

### MET 211
**Basic Mechanical CAD** (2)

Introduction to Mechanical Desktop. Command structure, screen controls, and use of menus to create, edit, and manipulate geometry for 2D and 3D models. Use of special features for the production of fully detailed layout drawings from 2D and 3D models. File management. Selected topics.

**1 Class Hour, 2 Laboratory Hours; Prerequisite: MET 116 Engineering Drawing II w/CAD or Department Chairperson approval.**

### MET 213
**Advanced Mechanical CAD** (2)

Use of the College's Mechanical CAD System to create, edit, and manipulate advanced 2D and 3D geometric entities. Use of multiple views, viewport, levels, masking, and color. Use of the axes options, construction planes and offsets, along with advanced 3D modeling techniques. Applications to assemblies and descriptive geometry. Selected topics.

**1 Class Hour, 2 Laboratory Hours; Prerequisite: MET 116 Engineering Drawing II w/CAD or Department Chairperson approval.**

### MET 220
**Programming CNC Machine Tools** (3)

An introductory course in the fundamentals and some of the advanced principles of CNC Milling/Turning. Topics to include: Introduction to NC/CNC Machinery (history, input media and tooling), New Part Production Setup, Typical Controller Operations (store, load and edit programs) and "Manual Part Programming" of CNC machine tools using the industry standard "G" and "M" Codes.

**2 Class Hours, 2 Laboratory Hours; Prerequisite: MET 122 Manufacturing Processes II or MET 120 Machining Processes.**

### MET 223
**Computer Integrated Machining** (3)

A continuation of Programming CNC Machine Tools. The emphasis of this course is on "Computer Assisted Part Programming." The course is designed to include students who have had no exposure to computer operations, but have knowledge of machine shop operations including CNC machine tools. MasterCAM and CadKey software are introduced. CAD software will be used to construct geometry database files of various parts. CAM software will be used to choose the machining process, assign tool parameters, define the tool path, give path verification, develop the post processor, and to transfer the CNC code to the CNC machine tool.

**2 Class Hours, 2 Laboratory Hours; Prerequisite: MET 220 Programming CNC Machine Tools.**

### MET 234
**Dynamics** (2)

Motion and Displacement, Velocity and Acceleration, Kinematics of Linear and Curvilinear Motion, Dynamics of Linear and Curvilinear Motion, Energy, Impulse, and Momentum, Kinematics of Mechanisms.

**1 Class Hour; 2 Laboratory Hours; Prerequisite: MET 134 Statics.**

### MET 235
**Strength of Materials** (3)

Normal, shear, bearing, thermal and torsional stresses and strains. Stress-strain curves. Shearing forces, bending moments, shearing stresses and deflection of beams. Columns and pressure vessels.

**2 Class Hours, 3 Laboratory Hours; Prerequisite: MET 134 Statics.**

### MET 238
**Mechanical Design** (4)

Application of the principles of strength of materials to the design of machine elements. Design and analysis of shafts, gears, bearings, weldments, and mechanical assemblies.

**3 Class Hours, 3 Laboratory Hours; Prerequisite: MET 235 Strength of Materials, and MAT 160 Applied Calculus.**

### MET 243W
**Fluid Mechanics** (3)

The study of fluid statics and dynamics. Topics include fluid forces, flow measurement, the steady flow energy equation, viscosity, laminar and turbulent flow, frictional losses, pipeline systems, introduction to turbomachinery, drag and lift. Writing Emphasis Course.

**2 Class Hours, 3 Laboratory Hours; Prerequisite: MET 134 Statics.**

### MET 244
**Thermodynamics** (3)

A study of the property and energy relationships in non-flow and steady flow applications. Topics include ideal gas relationships, real working substances, the first and second laws of thermodynamics, thermodynamic cycles, and available energy. The cycle concept is applied to steam power, internal combustion engines, gas turbines, refrigeration and heat pumps. Consideration is also given to combustion analysis and heat transfer.

**2 Class Hours, 3 Laboratory Hours; Corequisite: PHY 162 Physics II and MAT 160 Applied Calculus.**

### MET 246
**Refrigeration and Air Conditioning** (3)

Review of selected topics in thermodynamics, fluid mechanics and heat transfer. Analysis of the mechanical refrigeration cycle and psychometric process. Determination of heating and cooling loads. Introduction to the design of air handling systems and the selection of heating and cooling equipment.

**3 Class Hours; Prerequisite: PHY 161 Physics I.**

### MET 252
**Engineering Materials** (4)

Atomic bonding, crystalline and noncrystalline materials including metals, ceramics, polymers, and composites. Phase equilibria, microstructures, and strengthening and toughening mechanisms.

**3 Class Hours, 3 Laboratory Hours; Prerequisites: MET 235 Strength of Materials or Department Chair Approval.**

### MET 253 – IS
**Engineering Materials** (3)

Atomic bonding, crystalline and and noncrystalline materials including metals, ceramics, and polymers. Phase equilibria, microstructures, and strengthening and toughening mechanisms.

**2 Class Hours, 2 Laboratory Hours; Prerequisites: Second Year Student.**

### MET 263
**Engineering Statistics and Quality Control** (2)

Introduces measures of the central tendency and dispersion of data. Relates the theories of statics and probability to the industrial techniques of control charting and acceptance sampling. Emphasizes the concepts of accuracy, precision, and repeatability in engineering measurement. Topics include normal, hypergeometric, binomial, and Poisson distributions; control charts for mean, range, fraction defective, etc., single and multiple sampling; specifications tolerances, and measurement.

**1 Class Hour, 2 Laboratory Hours; Prerequisite: MAT 096 Elementary Algebra and Trigonometry.**

### MET 295
**Seminar** (1-3)

An opportunity for the interested students to become involved with the process of research, formal paper preparation, formal delivery and defense of ideas presented. Also a critical evaluation of ideas set forth by others.

**Prerequisite: As established by the Department Chairperson.**

### MET 298
**Cooperative Work Experience** (1)

On-the-job experience directly related to the Mechanical Engineering Technology field. Students will have the opportunity to work in one of the following areas: Computer Aided Drawing, Computer Numerical Control Machining, Equipment Maintenance, Materials Testing, Production Control, Technical Sales, Tooling Technology, or other MET related areas. To be eligible, students must be registered full-time in the MET Department, have a GPA of at least 2.2 with no 'F' grades, and have completed at least 24 credit hours, including MET 113, MET 121, CST 106, and MAT 130. On-the-job experience approximately 10-20 hours per week.

**Prerequisite: Placement by Department Chairperson.**

### MET 299
**Independent Study** (2-4)

The student undertakes an independent project in his specialty under the guidance of a faculty member. Only one independent study course allowed per semester. Consideration may be given a project involving a work assignment.

**Prerequisite: Approval of Department Chairperson.**

## MEDICAL LABORATORY TECHNOLOGY

### MLT 110
**Introduction to Medical Laboratory Technology** (1)

Overview of medicine and the field of Medical Technology. Designed to acquaint the student with the clinical laboratory and with the professional role of laboratory personnel within health care delivery systems. Review of safety issues connected with the clinical laboratory. Introduction to values, ethics, and interpersonal communication in these settings.

**5 Weeks: 3 Class Hours.**

### MLT 120
**Medical Laboratory Techniques and Practices** (1)

Introduction to basic skills and equipment used in the clinical laboratory. Orientation to elements of quality control, laboratory mathematics, clinical assay techniques, safety, and collection and handling of specimens for laboratory analysis.

**10 Weeks: 2 Class Hours, 1 Laboratory Hour; Prerequisite: MLT 110 or approval of MLT advisor.**

### MLT 201
**Hematology and Coagulation (4)**

Comprehensive study of the hematopoietic systems and the normal physiology and classic pathology of both systems. Emphasis is on the mechanics, interpretation and clinical significance of routine and special test procedures.

**3 Class Hours, 4 Laboratory Hours; Prerequisite: BIO 131 and approval of the MLT advisor.**

### MLT 202
**Urinalysis/Body Fluids (1)**

Study of the physiologic processes which result in the formation of urine and body fluids. Emphasis on the analysis of fluids and interpretation of the clinical significance test results.

**.75 Class Hours, .75 Laboratory Hours; Prerequisite: BIO 131 and approval of the MLT advisor.**

### MLT 204
**Fundamental Phlebotomy (1)**

Training and experience in the practice of phlebotomy, teaching students to recognize and use blood collection equipment, practice universal precautions, and perform procedures of routine venipuncture and skin puncture.

**5 Weeks: 3 Class Hours; Prerequisite: Approval of the MLT advisor.**

### MLT 205
**Immunology (3)**

Study of mechanisms of immune response, including discussions of humoral and cell-mediated immunity, complement, phagocytosis, and the interaction of all systems. Immunodeficiency, autoimmunity, immune proliferation, and immunopathology examined in relation and contrast to normal immune function.

**2 Weeks: 4 Class Hours, 2 Laboratory Hours per day; Prerequisite: BIO 132 and permission of MLT advisor.**

### MLT 206
**Immunohematology (3)**

Introduction to the field of blood banking. Theoretical knowledge of blood groups and blood grouping, component and transfusion therapies, transfusion reactions, and allo- and auto-antibody formation. In laboratory sessions, the student performs ABO and Rh grouping, antibody identification, and compatibility testing.

**2 Weeks: 4 Class Hours, 2 Laboratory Hours per day; Prerequisite: MLT 205 or permission of MLT advisor.**

### MLT 207
**Clinical Chemistry (5)**

Designed to cover principles, analytical methods, and clinical significance of clinical chemistry as performed in the medical laboratory. The relationship of physiochemical measurements of body function in health and disease including the renal, liver, digestive, and respiratory systems. Emphasis on those clinical tests which evaluate the function of these systems related to metabolism, protein synthesis, pH, blood gases, electrolyte balance, enzymes, and hormones. Laboratory work includes the theory, operation and maintenance of the specialized and semi- and fully automated analytical instrumentation used to perform these tests.

**3 Class Hours, 6 Laboratory Hours; Prerequisite: BIO 132, CHM 146 and permission of MLT advisor.**

### MLT 208
**Pathogenic Microbiology (3)**

An introduction to microorganisms of importance in human health and disease. Topics include the morphology, isolation, identification, and clinical significance of pathogens, the interrelationships of microorganisms and human hosts, and the prevention and control of infectious diseases. Emphasis on bacteriology; includes survey of mycology, parasitology, and virology.

**3 Class Hours; Prerequisite: BIO 131; Corequisite: MLT 209 or MLT 210.**

### MLT 209
**Pathogenic Microbiology Laboratory (1)**

Overview of basic clinical microbiology techniques, including collection and processing of clinical specimens, media used for isolation and identification of organisms common to human flora, aseptic techniques, staining procedures, susceptibility testing, and isolation techniques. Course also includes lecture unit on immunology, including humoral and cell-mediated immunity, complement, and serological testing.

**3 Laboratory Hours; Corequisite: MLT 208.**

### MLT 210
**Diagnostic Microbiology Laboratory (3)**

Comprehensive study of diagnostic methods for identification of normal and pathogenic microorganisms from clinical materials by appropriate laboratory techniques. Emphasis on cultural, microscopic and biochemical characteristics, chemical significance, collecting and processing of clinical specimens, diagnostic tests, and susceptibility tests.

**2 Class Hours, 4 Laboratory Hours; Corequisite: MLT 208.**

### MLT 214
**Specialized Phlebotomy (2)**

Advanced techniques in collecting venous blood and capillary blood specimens. Topics include anatomy and physiology as related to specimen collection; properties of arterial blood versus venous blood; specialized collection equipment; specialized collection techniques; requisitioning, specimen transport and specimen processing, and quality assurance. Competency required in the performance of routine venipuncture and micro-blood drawing techniques.

**10 Weeks: 3 Class Hours; Prerequisite: MLT 204 or permission of MLT advisor.**

### MLT 215
**Phlebotomy Practicum (5)**

Application of phlebotomy techniques in a clinical laboratory setting or health care environment. Focus on safety, quality control, communication, interpersonal skills, and ethical considerations relating to patients. This course will provide 160 hours of clinical phlebotomy experience in the affiliate clinical agencies.

**160 Laboratory Hours; Prerequisite: MLT 214 and permission of MLT advisor.**

### MLT 240
**Clinical Affiliation I (5)**

Performance of procedures in clinical chemistry, immunology-serology, and immunohematology in an affiliated medical laboratory under direct supervision of medical laboratory personnel. Students will conduct routine analytical procedures, develop their laboratory skills, and apply knowledge gained in the program. Emphasis is on specimen collection and processing quality control, preventative maintenance, laboratory safety, and significance of abnormal results.

**5 Weeks: 40 Hours per Week; Prerequisite: MLT 205, MLT 206, MLT 207 and permission of the MLT advisor.**

### MLT 241
**Clinical Affiliation II (4)**

Performance of procedures in urinalysis, body fluid analysis, phlebotomy, hematology, and coagulation in an affiliated medical laboratory under direct supervision of medical laboratory personnel. Students will conduct routine analytical procedures, develop their laboratory skills, and apply knowledge gained in the program. Emphasis is on specimen collection and processing, quality control, preventative maintenance, laboratory safety, and significance of abnormal results.

**4 Weeks: 40 Hours per Week; Prerequisite: MLT 201, MLT 202, MLT 204 and permission of the MLT advisor.**

### MLT 242
**Clinical Affiliation III (2)**

Performance of procedures in microbiology in an affiliated medical laboratory under direct supervision of medical laboratory personnel. Students will conduct routine analytical procedures, develop their laboratory skills, and apply knowledge gained in the program. Emphasis is on specimen collection and processing, quality control, preventative maintenance, laboratory safety, and significance of abnormal results.

**2 Weeks: 40 Hours per Week; Prerequisite: MLT 208, MLT 210, and permission of the MLT advisor.**

### MLT 298
**Special Topics (1-2)**

Special courses covering topics in Medical Technology which are not available within and are beyond the scope of the usual course offerings.

**Prerequisite: Departmental approval.**

### MLT 299
**Independent Study (1-4)**

Individual student project in an MLT specialty, conducted under the direction of a faculty member and approved by the department chairperson.

**Prerequisite: Departmental approval.**

## MANUFACTURING RESOURCE MANAGEMENT

### MRP 110
**Principles of Materials Management (4)**

An introduction to materials management in the modern manufacturing environment. Emphasis on understanding the planning, directing, and controlling of materials moving into, through, and out of the company. A basis for further study, especially for those interested in certification.

**4 Lecture Hours**

### MRP 154
**Purchasing (3)**

An overview of the procurement and materials management activities that occur in an industrial environment. Discussion topics include supplier selection, pricing, negotiation, contracts, inventory, management and quality. Case studies are used to emphasize purchasing's role in the organization.

**3 Class Hours**

### MRP 155
**Advanced Purchasing (4)**

An advanced level overview of procurement and materials management fundamentals. Greater focus

on the operational aspects of the procurement function. Topics include buying decisions and plans, cost analysis, purchase agreements, purchasing analysis of capital equipment, services, institutional and government purchases, purchasing's growing role in new product development and ethical standards. Case studies will be reviewed to emphasize the procurement concepts.

**4 Hours Lecture per week; 4 Semester Credits; Prerequisite: MRP 154 Purchasing.**

### MRP 195
**Manufacturing Resources Management I (4)**

An in-depth and intensive study of the planning and organization of manufacturing resources. Topics include strategic business planning, demand planning, production and resource requirements planning, master schedule planning and organization, materials requirements planning, and capacity requirements planning. Designed to help prepare students seeking APICS certification.

**4 Hours Lecture per week; 4 Semester Credits.**

### MRP 295
**Manufacturing Resources Management II (4)**

An in-depth and intensive study of the direction and control of management resources, as well as the implementation of existing and emerging systems and technologies. Includes study of Production Activity Control, Just in Time manufacturing techniques, and the implementation of existing and emerging systems and technologies. Designed to help prepare those seeking APICS certification.

**4 Hours Lecture per week; 4 Semester Credits.**

### MRP 296 (4)
**C.P.M. - A.P.P. Certification Directed Study**

This course is designed to provide an in-depth coverage of the purchasing topics covered by the C.P.M. exam Modules 1, 2, 3, and 4 as sponsored by the National Association of Purchasing Management (NAPM). The course provides an overview of the certification process, covers the purchasing topics listed below and will conclude with sample CPM exam questions and review.

**4 Hours Lecture per week; 4 Semester Credits; Prerequisites: MRP 154 Purchasing; MRP 255 Advanced Purchasing**

## MUSIC

### MUS 101
**Introduction to Music (3)**

A survey course examining the music of the great composers representing each major period of Music History. How to listen to different forms of music such as symphonies, concertos, opera and jazz will be included in the topics covered. Emphasis on developing listening skills to bring the student to an informed awareness and understanding of great music.

**3 Class Hours**

### MUS 105
**Music Theory I (3)**

A beginning course in music theory, including the rudiments of music, harmonic analysis including inversions through the dominant seventh chord, passing tones and part writing in root position of all diatonic triads excluding the diminished chord.

**3 Class Hours**

### MUS 106
**Music Theory II (3)**

Continuation of Music Theory I including part writing of all diatonic chords in first and second inversion, harmonic analysis of all non harmonic tones including inversions of the dominant seventh chord and transposition and scoring for brass instruments.

**3 Class Hours**

### MUS 107
**Music Theory III (3)**

Continuation of Music Theory II including writing and analysis of the dominant seventh chord, the diminished seventh chord, applied dominants, chromatic third relationships, modulation to related and foreign keys, mode mixture, Neopolitan 6th chord, Augmented Sixth chords, analysis of form including Sonata Form, Rondo, Theme and Variations and an introduction to Species Counterpoint.

**3 Class Hours**

### MUS 108
**History of Music: Renaissance to 1800 (3)**

Students will develop an understanding of music from the Middle Ages through 1800 A.D. Active listening and discussion of the important historical and cultural influences and the development of music during the Medieval, Renaissance, Baroque and Classical Periods will be examined.

**3 Class Hours**

### MUS 109
**Ragtime to Rock: American Popular Music (3)**

A survey of American popular music including folk songs, musical theater, jazz, country, rock, and bluegrass. This course will familiarize the student with popular music which helped shape the American culture and reflect important social, historical and political events.

**3 Class Hours**

### MUS 111
**19th Century Music (3)**

Important musicians and musical styles of the Romantic Period. Emphasis on developments in piano literature, the symphony orchestra and opera. Listening to selected recordings and attendance at local concerts.

**3 Class Hours; Prerequisite: MUS 101 - Introduction to Music or permission of the instructor.**

### MUS 112
**20th Century Music (3)**

Important musicians and musical styles of the 20th century. Emphasis on the trends and development of music in America. Leading European composers.

**3 Class Hours; Prerequisite: MUS 101 Introduction to Music or consent of instructor.**

### MUS 114
**History of Opera (3)**

A survey of the various styles of opera from the 17th through the 20th centuries. Emphasis on the works of master composers — Monteverdi, Mozart, Verdi and Wagner; impact of opera on music history; social and cultural contents of opera.

**3 Class Hours; Prerequisite: MUS 101 or permission of instructor.**

### MUS 115
**Ear Training I (1)**

Aural training in melodic dictation and sight singing in two clefs. Also discrimination of intervals needed to sight read music.

**2 Studio Hours**

### MUS 116
**Ear Training II (1)**

A continuation of MUS 115 - Ear Training I. Emphasizes dictation in two parts in various clefs and further develops interval and rhythmic discrimination.

**2 Studio Hours; Prerequisite: MUS 115 - Ear Training I.**

### MUS 117
**Ear Training III (1)**

A continuation of MUS 116 - Ear Training II. Will stress the development of dictation in three parts, modulation, and sightsinging.

**2 Studio Hours; Prerequisite: MUS 116 - Ear Training II.**

### MUS 120
**Piano Class I (1)**

Group piano lessons are given which will allow students the opportunity to develop basic piano skills and develop proper technique on the instrument.

**2 Laboratory Hours**

### MUS 121
**Piano Class II (1)**

This course is a continuation of Piano Class I and further develops the necessary piano skills required to perform elementary to intermediate piano literature.

**2 Laboratory Hours; Prerequisite: MUS 120 Piano Class I.**

### MUS 180
**Jazz Improvisation (2)**

Basic concepts of soloing in the jazz idiom for instrumentalists. Teach students to interpret chord symbols and understand the sounds that they represent in a meaningful way to create a jazz solo with their instrument. Attendance at jazz concerts required.

**1 Class Hour, 3 Studio Hours, 2 Lecture Hours; Prerequisite: MUS 105 Music Theory I or permission of instructor; May be repeated for credit once.**

### MUS 185
**Beginning Guitar (1)**

Emphasis on Music Fundamentals, scales, chords, reading rhythms and learning to accompany singers. Students must own their own instruments.

**2 Studio Hours**

### MUS 186
**Guitar Ensemble (1)**

Provide students the opportunity to perform music for the guitar in a group setting. Emphasis will be on group and individual playing. The music played will be chosen with respect to the historical literature available.

**2 Studio Hours; May be repeated for credit 3 times.**

### MUS 187
**The Guitar: Its History and Music (3)**

The development of the physical and musical history of the instrument is presented through live performances and recordings. The history of the guitar and its importance relative to composers and performers throughout music history will be identified.

**3 Class Hours**

### MUS 188
**Practical Music Theory for the Performing Musician (3)**

Designed to help the novice performer of music understand key signatures, scales, rhythms, chords, form intervals, transposition, notation and sight read-

ing. Emphasis on fundamentals of music and practical application of what is learned.

**3 Class Hours**

### MUS 189
**Flute Ensemble** (1)

May be repeated 3 times for credit.

**2 Studio Hours**

### MUS 190
**The College Choir** (1)

Students who sing in the College Choir receive one credit per semester.

**3 Studio Hours (May be repeated 3 times for credit.)**

### MUS 191
**Music Performance** (1)

Students who participate in the recitals or concerts of the academically associated Broome Community College Music Performance groups receive one credit per semester.

**May be repeated 3 times for credit.**

### MUS 192
**Woodwind Ensemble** (1)

**May be repeated 3 times.**

### MUS 193
**Brass Ensemble** (1)

**May be repeated 3 times.**

### MUS 194
**Voice Class I** (1)

Provides any student the opportunity to learn correct vocal production, breath control, diction, articulation and musical interpretation of art songs. Emphasis is on tonal production and group and individual singing.

**2 Studio Hours**

### MUS 195
**Jazz Ensemble** (1)

By audition only.

**May be repeated 3 times.**

### MUS 196
**String Ensemble** (1)

(Not for guitarist.)

**May be repeated 3 times.**

### MUS 197
**Applied Music I** (1)

For students in their first semester. To enable instrumental and vocal students to study privately with a teacher and develop their musical performance abilities. Not a course for beginners. A minimum of 15 lessons required per semester. Cost of lessons not included in BCC tuition.

**2 Studio Hours**

### MUS 198
**Applied Music II** (1)

Continuation of MUS 197 Applied Music I, for second semester students. A minimum of 15 lessons required per semester and continued musical growth and maturity in solo and ensemble performance is expected. Cost of lessons not included in BCC tuition.

**2 Studio Hours; Prerequisite: MUS 197 Applied Music I.**

### MUS 199
**Intermediate Guitar** (1)

Continuation of beginning guitar. Emphasis on picking techniques, fingerings, chords, music readings and performance. There will also be a greater emphasis on technique.

**2 Studio Hours; Prerequisite: MUS 185 Beginning Guitar.**

### MUS 201
**College Band** (1)

College band is required of all woodwind, brass and percussion majors and open to the campus community. The band performs two major concerts during the year as well as providing music for various college functions. Membership is by audition. May be repeated three times.

**3 Studio Hours**

### MUS 294
**Voice Class II** (1)

Continuation of Voice Class I and for students who have performed in high school musicals, chorus and/or those who have studied privately. This is a group situation in which vocal literature appropriate to individual and group singing will be sung.

**2 Studio Hours; Prerequisite: MUS 194 Voice Class I or permission of instructor.**

### MUS 297
**Applied Music III** (1)

Continuation of MUS 198 Applied Music II, for third semester students.

**2 Studio Hours; Prerequisite: MUS 198 Applied Music II.**

### MUS 298
**Applied Music IV** (1)

Continuation of MUS 197 Applied Music III, for fourth semester students.

**2 Studio Hours; Prerequisite: MUS 297 Applied Music III.**

### MUS 299
**Independent Study: Music** (1-3)

An individual student project concerned with advanced work in a specific area of music. Conducted under the direction of a faculty member, independent study is concerned with material beyond the scope and depth of the ordinary course.

**Prerequisite: 3 semester hours of college level work in music.**

## OVERSEAS PROGRAMS
SEE "SAP."

## PHYSICAL EDUCATION

### PED 100
**Archery** (1/2)

Fundamentals of shooting — seven-step approach. Proper target shooting technique and form stressed.

**4 Class Hours, 11 Laboratory Hours per semester.**

### PED 103
**Backpacking** (1)

A series of laboratories and lectures culminating in a four-day mandatory backpacking trip. Students learn to select, care for, and properly use the essential equipment, as well as some low-cost alternatives to expensive items. The stress is on safety and low ecological impact camping.

**15 Class Hours, 15 Laboratory Hours per half semester.**

### PED 106
**Badminton** (1/2)

Instruction and practice in the various strokes. Rules, terminology and equipment. Strategy for singles and doubles.

**4 Class Hours, 11 Laboratory Hours per half semester.**

### PED 107
**Ballet I** (1)

Beginning Ballet will introduce students to the basic elements of classical ballet in ballet technique classes.

**8 Class Hours, 22 Laboratory Hours.**

### PED 112
**Bowling** (1/2)

Bowling fundamentals including ball selection, grip, stance, approach and delivery. Etiquette, scoring, correction of basic mistakes in delivery. Classes are at off-campus site and students must pay for own games, shoe rental and transportation.

**3 Class Hours, 12 Laboratory Hours per half semester.**

### PED 118
**Personal Fitness** (1)

Individualized physical fitness program. Students identify their personal fitness profiles then participate in an exercise program designed to improve or maintain their fitness levels.

**8 Class Hours, 22 Laboratory Hours.**

### PED 119
**Personal Fitness** (1-1/2)

Individualized physical fitness program. Students identify their personal fitness profiles, then participate in an exercise program designed to improve or maintain their fitness levels.

**12 Class Hours, 33 Laboratory Hours.**

### PED 121
**Golf** (1/2)

Basic skills, etiquette and strategy. Student required to play nine holes and hit at a driving range, providing their own transportation and fees. Clubs provided for those without. For the beginning golfer.

**4 Class Hours, 11 Laboratory Hours per half semester.**

### PED 122
**Horsemanship** (1)

Basics of grooming, saddling and safety procedures. Development and expansion of riding skills. Elementary knowledge of horses, their care and maintenance.Two options available: 1. English. 2. Western. (Additional fee and taught off campus.)

**8 Class Hours, 22 Laboratory Hours per semester.**

### PED 127
**Jogging** (1/2)

Jogging as a possible leisure time activity. Physiological benefits, improvement of technique and basic principles of training. Individual works at own level and sets own goals. Distance usually worked: 2 miles.

**3 Class Hours, 12 Laboratory Hours per semester.**

### PED 130
**Karate** (1)

Classical karate on the beginning and intermediate levels. Philosophy and brief history of karate. Basic kata (forms) together with self-defense and prearranged sparring techniques. Free sparring with no body contact. Emphasis is on physical conditioning and mental discipline.

**8 Class Hours, 22 Laboratory Hours per semester.**

### PED 135
**Jazz Dance I** (1)

Jazz dance technique through practical skill work, jazz styles and dance combinations.

**8 Class Hours, 22 Laboratory Hours per semester.**

### PED 137
**Jazz Dance II** (1)

A continuation of Jazz Dance I, emphasizing jazz dance techniques throught practical skill work.

**8 Class Hours, 22 Laboratory Hours per semester; Prerequisite: PED 135 or previous dance experience.**

### PED 139
**Self-Defense** (1/2)

Brief explanation of karate, judo and other martial arts. Approximately 10 basic self-defense movements which, if properly acquired and practiced, can be applicable to many situations. Basic techniques of blocking, falling, punching and general body shifting motions. No definite dress required. A student should remember that exercises are meant to increase flexibility and endurance of muscles, and the dress should be a comfortable one for this purpose. Although this is not the formal karate class, the class will be conducted with formality and discipline.

**3 Class Hours, 12 Laboratory Hours per semester.**

### PED 143
**Cross-Country Skiing** (1/2)

Instruction and practice in cross-country skiing — beginning through advanced. conduct, terminology, safety and equipment. Classes both on and off campus. Skis, poles, bindings provided; students responsible for boots and transportation.

**3 Class Hours, 12 Laboratory Hours per semester.**

### PED 144
**Aerobics** (11/2)

A low impact, high energy cardiovascular program done with a music background. Floor aerobics, step aerobics, body toning, and resistance bands included. Open to both men and women.

**12 Class Hours; 33 Laboratory Hours.**

### PED 146
**Aerobics** (1)

A low impact, high energy cardiovascular program done with a music background. Floor aerobics, step aerobics, body toning, and resistance bands included. Open to both men and women.

**8 Class Hours, 22 Laboratory Hours per semester.**

### PED 147
**Soccer (Women)** (1/2)

### PED 148
**Soccer (Men)** (1/2)

Instruction and practice in the fundamental skills of kicking, tackling, trapping, dribbling and heading. Rules and tactics. Team competition. Separate sections for men and women.

**4 Class Hours, 11 Laboratory Hours per half semester.**

### PED 149
**Snorkeling** (1)

Designed to teach the swimmer the techniques of snorkeling, safety equipment selection and skills. Offered to student taking Tropical Ecology during intersession.

**8 Class Hours, 22 Laboratory Hours per semester.**

### PED 150
**Personal Nutrition** (1)

Students will learn the basic principals of good nutrition; how energy nutrients work within their body and how they can use nutrition to improve their overall health. They will also be able to utilize this information to decipher the current nutrition recommendations being addressed in the media.

**15 Class Hours**

### PED 155
**Trim and Tone** (2)

A course designed for people seriously interested and committed to changing their body composition. This class requires daily attendance for activity and instruction on weight loss, diet, nutrition, muscle strength, and toning. Workout clothing including sweat suits or shorts and T-shirt are required as well as a good pair of gym shoes.

**1 lecture, 4 Laboratory Hours.**

### PED 168
**Exploring Healthy Lifestyles** (1)

This course is a theoretical classroom approach to assessing and evaluating healthy pathways in life. Students will explore and analyze the components of diet and exercise that can be chosen which may lead to a happier and healthier life. Emphasis is placed on making educated decisions and using the self-motivation and discipline necessary to make changes leading to a more active healthy lifestyle.

**15 Class Hours**

### PED 169
**Tennis** (1/2)

Instruction and practice in the basic strokes — forehand, backhand, serve and volley. Rules, terminology and equipment. Strategy for singles and doubles.

**4 Class Hours, 11 Laboratory Hours per half semester.**

### PED 170
**Trail Riding** (1/2)

Basics of grooming, saddling, and safety procedures. Development and expansion of riding skills — learning to cope with natural hazards like creeks, traffic, terrain. Elementary knowledge of horses, their care and maintenance. (Taught off campus and an additional fee is required.)

**4 Class Hours, 11 Laboratory Hours per half semester.**

### PED 171
**Physiology of Exercise** (1)

Effect of exercise on cardiovascular and respiratory systems. Components of fitness, principles of training along with training prescriptions. Energy supply systems discussed. Effective nutrition, ergogenic aids and environmental factors.

**15 Class Hours**

### PED 172
**Volleyball** (1/2)

A basic course in the fundamentals of power volleyball. Team strategy, history and rules. Drills and competitive play.

**4 Class Hours, 12 Laboratory Hours per half semester.**

### PED 173
**Fitness Walking** (1-1/2)

Fitness Walking is a safe form of aerobic exercise which can be incorporated into one's life style and individual fitness program. Proper shoes and foul weather gear is needed.

**9 Class Hours, 36 Laboratory Hours.**

### PED 175
**Weight Training** (1/2)

Introduction to the Universal Gym and free weights as a means of physical conditioning. Components of fitness and principles of training discussed. Several strength building prescriptions presented, including free weights.

**3 Class Hours, 12 Laboratory Hours per half semester.**

### PED 299
**Independent Study** (1/2 or 1)

Student undertakes a project of own choice with guidance from faculty member.The project is intended for a student who has completed requirements.

**Prerequisite: 2 Semester Hours in Physical Education.**

## PHILOSOPHY

### PHI 102
**General Philosophy** (3)

This course introduces Philosophy by examining some of its major areas, including Metaphysics (theories concerning the nature of reality), Epistemology (theories concerning the nature of human knowledge). Ethics (theories of morality) and Logic.

**3 Class Hours**

### PHI 104
**Philosophy of Religion** (3)

Relation of religion and philosophy and an investigation of different concepts of God. Analysis of religions types and experiences, different attempts to justify religious beliefs. Investigation of the logic of religious experience through an analysis of the leading ideas in the philosophy of religion both as an historical and contemporary phenomenon.

**3 Class Hours**

### PHI 201
**Ethics: Moral Philosophy** (3)

Main classical and modern ethical theories, including such theorists as Plato, Aristotle, Mill, Kant, Moore. Comparison and contrast of normative and meta-ethical theories, the good life and how one should act, the meaning of moral judgments and the criteria of validity, justification of moral beliefs and the ground of moral responsibility.

**3 Class Hours**

### PHI 202
**Logic** (3)

Analysis and practical application of the elements of logic as they apply on both a linguistic and formal level. Forms of argument; informal and formal fallacies. Determining validity and invalidity under Aristotelian, propositional, and predicate logic. Use of Venn diagrams; translating ordinary language into syntax appropriate to those logical systems.

**3 Class Hours**

### PHI 206
**Social and Political Philosophy** (3)

A philosophical study of the social/political organization of society through an examination of such topics as justice, authority, leadership, individual rights, and of the relationship between the state and various

social institutions, such as family, business, church, and education.

**3 Class Hours**

### PHI 299
**Independent Study: Philosophy (1-3)**

An individual student project concerned with advanced work in a specific area of philosophy. Conducted under the direction of a faculty member, the independent study is concerned with material beyond the scope and depth of ordinary course.

**Prerequisite: 3 semester hours of college level work in philosophy.**

## PHYSICAL SCIENCE

### PHS 110
**Physical Science for Information Management (3)**

Physical principles related to the recording, storage, and retrieval of information. Paper, magnetic, electrical, optical, anmd photograpohic media are explored. Methods of physics and chemistry are applied to determine the longevity of record storage and retrieval possibilities in the event of a disaster. Does not meet science requirement for LAAA, LAAS, or BAAS degree.

**2 Class Hours, 2 Laboratory Hours.**

### PHS 111
**Earth Investigations (3)**

Investigate Earth's atmosphere, its geology and its place in the solar system. Topics of study may include the ways river and glaciers change Earth through erosion and the effects of plate tectonics in causing earthquakes and volcanoes. You will discover how weather and/or geology affect our every-day lives and how we use and modify our physical surroundings. Current scientific topics may be introduced by both students and instructors. Binghamton's regional weather and geology will be emphasized. This course does not meet science requirement for LAAA, LAAS or BAAS degree.

**2 Class Hours; Corequisite: PHS 111L.**

### PHS 111L
**Earth Investigations Lab (0)**

From a variety of laboratory experiences, including a campus field trip, you will work in cooperative groups to study rocks and minerals, maps, weather data and processes which change Earth's surface to achieve a greater understanding of your physical environment.

**2 Lab Hours; Corequisite: PHS 111.**

### PHS 112
**Investigations of the Natural World (4)**

Explore the relationships between living organisms and their physical environment in this activity-based course. Study Earth's atmosphere and seasons and explore the resulting adaptations of living things, for example through photosynthesis and respiration. Investigate rocks and minerals as the building blocks of the solid Earth and cells as the basic unit of life. Biologic and earth science concepts are integrated to show the prehistoric and modern interactions among Earth's atmosphere, its rocks and minerals and its life. Students are expected to become personally involved with in-class and at-home activities and projects. Learning is accomplished by experimentation and discussion within cooperative groups; the laboratory becomes the classroom. Appropriate for Elementary Education and Early Childhood majors.

**3 Class Hours; 3 Lab Hours; 6 Integrated Class Hours.**

### PHS 113
**Astronomy - Exploring the Universe (4)**

(Available in ASL mode)

Exploring the universe is an exciting challenge as you are led away from earth on a journey through the cosmos and back again. Starting with a look at the historical origin of the constellations and a basic knowledge of the sky, you are taken into the realm of the stars, galaxies, and the universe at large. Current theories of the birth, life, and death of stars will show you the possibilities of extraterrestrial life. Theories of the origin of the universe will give you an informed opinion of the nature of existence itself. The return trip to earth brings you a look at our solar system with the NASA provided knowledge of the planets. Come and be a non-mathematical astronomer!

**3 Class Hours; Corequisite: PHS 113L Astronomy Laboratory.**

### PHS 113L
**Astronomy Laboratory (0)**

Extensive hands-on experience is generated in this laboratory, which makes full use of the off-campus Link Planetarium and Kopernik Observatory. NASA supplied moon rock samples allow a close up view of earth's nearest neighbor.

**3 Lab Hours; Corequisite: PHS 113.**

### PHS 114
**Meteorology: Investigating the Weather (4)**

(Available in ASL mode)

Does Binghamton have some of the worst weather in the nation? Is severe weather getting worse? How accurate are the weather forecasts? If you have ever wondered about these questions and others, this course will help you find these answers. This introductory course intends to educate you on the fundamentals of the Earth's atmosphere, weather and climate. Topics including: the atmosphere and its energy transformations, the seasons, atmospheric optics, water vapor, precipitation, and the wind are woven together to enable you to understand how weather works and what constitutes severe weather. Other topics of study might include El Nino, ozone depletion and global warming. You will participate in the act of doing science by investigating a weather topic. After taking this course, you should have a better understanding of the science of meteorology, how science progresses, and why Binghamton has such cloudy weather.

**3 Class Hours; Corequisite: PHS 114L.**

### PHS 114L
**Meteorology (0)**

(Available in ASL mode)

From a variety of lab experiences and a field trip, you will work in learning communities to gain an understanding of how meteorologists collect and analyze weather data to create maps and charts that aid in weather prediction.

**3 Lab Hours; Corequisite: PHS 114.**

### PHS 115
**The Dynamic Earth (4)**

(Available in ASL mode)

Why does Binghamton have such steep hills and flat valleys? Why do we find such a great variety of rocks in our backyard? Why doesn't Binghamton have more earthquakes or volcanoes? If you have ever wondered about these questions and others like them, this course will help you to discover the answers to them. This course will show you how geologists collect information, analyze and interpret observations. You will begin by learning how to tell the differences between rocks and minerals and what those differences mean to our region. After studying this, you will study local examples of streams, the effects of glaciers, volcanoes, earthquakes and why mountains and oceans form. Other topics may be substituted in appropriate parts of the course depending on exciting developments on our dynamic planet. Ultimately, you will gain working knowledge of the geologic wonders that surround you at home and when you travel.

**3 Class Hours; Corequisite: PHS 115L.**

### PHS 115L
**The Dynamic Earth Lab (0)**

(Available in ASL mode)

A series of labs conducted by students in learning communities will allow you to gain a hands-on understanding of geologic concepts and processes, while several field trips will allow you to better understand your local geologic environment.

**3 Lab Hours; Corequisite: PHS 115.**

### PHS 116
**Energy and the Environment (4)**

How does the way we use energy affect the world around us? How much energy does it take to drive our cars or light our homes? How can we save energy and will saving energy make a difference? Learn about the environmental threats, including global warming, ozone depletion, and acid rain. Discover positive things we can do as a society and as individuals to help. Investigate the sources of the energy we use everyday. Energy sources include: fossil fuels, nuclear, and alternative sources such as solar, wind, hydropower and geothermal energy. Current scientific topics may be introduced by both students and instructors.

**3 Class Hours; Corequisite: PHS 116L.**

### PHS 116L
**Energy and the Environment Laboratory (0)**

This course is integrated with PHS 116. This laboratory experience will include hands-on exercises, field trips and an analysis of your own energy use.

**3 Lab Hours; Corequisite: PHS 116.**

### PHS 117
**Exploring Everyday Phenomena (4)**

This course uses activities that engage the students in hands-on learning of common physical concepts by experimentation. The course will improve students' perspectives and comfort with science while promoting scientific literacy. There will be no distinction between lab and lecture since the activities are an integral part of the teaching and learning process in the course. The methods and ideas of the course will usually be based on the use of commonly available materials. Group-based activities include observations and measurements of size perspective, solids, liquids,

* ASL mode courses are available through the Internet.

gases, heat, simple machines, magnets, static electricity and electrical devices. Appropriate for Elementary Education and Early Childhood majors.

**3 Class Hours; 3 Lab Hours; 6 Integrated Class Hours.**

### PHS 125
**Historical Geology: The History of Life and Planet Earth (4)**

Did an asteroid really cause the extinction of the dinosaurs? Where did life come from and how did it evolve? Why do I find fossils of marine organisms in my back yard? If you have ever wondered about these questions, you can discover the answers by taking this course. This course intends to give you a perspective of the enormity of the geologic history of the Earth and the life that lives on it. You will learn how scientists know how old a rock or fossil is and what the conditions in the past were like when it formed. You will also investigate how scientific thinking about the geologic past have changed with respect to the age of the Earth and what the dinosaurs were like. By looking at some bizarre groups of fossils, questions about evolution, speciation and chance will be examined. Also, a detailed study of the local geologic past will reveal that Binghamton was on the shoreline of an ancient tropical sea about 365 million years ago.

**3 Class Hours; Corequisite: PHS 125L.**

### PHS 125L
**Historical Geology Lab (0)**

Several in-lab exercises will acquaint you with the geologic and biologic principles and concepts that will then be used by you on many field trips to local sites so you can discover the geologic history of South-Central New York State.

**3 Lab Hours; Corequisite: PHS 125.**

## PHYSICS

### PHY 090
**Preparatory Physics (4)**

In this course, students will learn how to apply basic numerical, algebraic, and trigonometric procedures to the solution of physical problems. Topics are selected from the fields of mechanics, heat, wave motion, electricity, optics, and electromagnetic radiation. Numerous laboratory exercises and in-class activities are integrated into the course to reinforce understanding of the physical principles. The course is designed for students who have not had high school physics, or need a basic introduction to physics before taking higher-level physics or technology courses.

**3 Class Hours; 2 Lab Hours; Prerequisite: MAT 096 Elementary Algebra and Trigonometry.**

### PHY 118
**Physics for Physical Therapist Assistants (4)**

Forces, torques, linear motion, energy, momentum, conservation laws; temperature and heat, temperature scales, heat transfer, changes of state; electric fields, potential difference; Ohm's law, DC circuits, magnetic field, electromagnetic induction, motion of charges in magnetic fields; wave motion, electromagnetic spectrum, atomic structure.

**3 Class Hours, 2 Laboratory Hours; Prerequisites: MAT 096 Elementary Algebra and Trigonometry or equivalent.**

### PHY 160
**Applied Physics - IS (4)**

This is a one-semester course in physics with emphasis on hands-on activities completed by students working in teams. General topics to be discussed include mechanics, vibrations and wave motion, light and optics, electricity and magnetism, thermodynamics and modern physics. Class activities and laboratory experiences are integrated into the class discussions. Computers will be used extensively for data analysis and presentation. Oral and written reports are required. This course may not be used as a substitute for PHY 161 or PHY 162.

### PHY 161
**Physics I: Mechanics and Heat (4)**

(Available in ASL mode)

Physics includes the study of matter and motion, mass and energy. It tells you how and why things move. It is important for everyone from technicians to doctors to know why something happens. Problem solving skills that you learn in physics will help you in other courses, as will the skills in laboratory observation and analysis. In Mechanics you will learn about forces and the accelerations they produce, and conservation laws for energy and momentum. In thermodynamics you will study how heat energy affects the properties of matter. This includes topics that range from how atoms bounce around on a hot day to the operation of a gasoline engine. Physics provides the underlying concepts used in technologies and in other sciences. Basic principles are applied to solve realistic problems, using algebra and elementary trigonometry. This course is designed for Liberal Arts, Computer Science, and Technology students and others who are interested in learning why things happen the way they do.

**3 Class Hours; Prerequisite: MAT 130 or 136; Corequisite: PHY 161L.**

### PHY 161L
**Physics I Laboratory (0)**

(Available in ASL mode)

This course provides hands-on experiences covering various topics in mechanics and thermodynamics. Experiments are designed to emphasize the emperical basis for the principles covered in class. Tools and methods for gathering and interpreting experimental data will provide you with problem solving techniques, measurement skills, and applications of theory.

**3 Lab Hours; Prerequisite: MAT 130; Corequisite: PHY 161.**

### PHY 162
**Physics II: Wave motion, Electromagnetism, and Atomic Physics (4)**

(Available in ASL mode)

This is the second course of an algebra-based sequence in physics (see PHY 161, above). Your study of sound and light will reveal them as examples of waves, and will include study of optical instruments. Electricity and magnetism introduces you to the basic properties of charges and currents, producing electric fields and magnetic fields. You will progress to understand electric energy as one essential component of our standard of living. Some selected topics in modern physics are also covered, including the study of atoms and their nuclei.

**3 Class Hours; Prerequisite: PHY 161; Corequisite: PHY 162L.**

### PHY 162L
**Physics II Laboratory (0)**

(Available in ASL mode)

Hands-on experiences will provide you with problem solving techniques, measurement skills, and applications of theory.

**3 Lab Hours; Corequisite: PHY 162.**

### PHY 181
**Physics for Engineers & Scientists I: Mechanics and Thermodynamics (4)**

Engineering Physics, sometimes called "University Physics," uses calculus in the development of principles. The topics include the description of motion and the causes of motion, with the ideas of force, energy, power, and momentum; equilibrium and rotation; and heat and its effects. This course is designed for students studying engineering, computing, science, or mathematics.

**3 Class Hours; Pre-Corequisite: MAT 181 and EGR 100; Corequisite: PHY 181L.**

### PHY 181L
**Physics for Engineers & Scientists I: Laboratory (0)**

Hands-on experiences will provide you with problem solving techniques, measurement skills, and applications of theory.

**3 Lab Hours; Corequisite: PHY 181.**

### PHY 182
**Physics for Engineers & Scientists II: Sound, Light, Electricity and Magnetism (4)**

This continuation of PHY 181 covers the nature of sound and of light and their behavior; electric and magnetic forces and fields; electric circuits and electric energy transfer; and electromagnetic induction. This is the second semester of University Physics taught at most major Engineering schools.

**3 Class Hours; Prerequisite: PHY 181 and PHY 181L; Corequisite: MAT 182 and EGR 101.**

### PHY 182L
**Physics for Engineers & Scientists II: Laboratory (0)**

Hands-on experiences will provide you with problem solving techniques, measurement skills, and applications of theory.

**3 Lab Hours; Corequisite: PHY 182.**

### PHY 281
**Physics for Engineers & Scientists III (4)**

This elective is the third and last physics course for Engineering and Science majors. It covers Einstein's theory of relativity, quantum mechanics, atomic physics, and nuclear physics. Students majoring in Electrical Engineering, Nuclear Engineering, and Physics should consider taking this course. (This course is only offered as enrollment warrants)

**4 Class Hours; Prerequisite: PHY 182, PHY 182L, and MAT 182.**

## PARAMEDIC

### PMD 201
**Paramedic I (14)**

PMD 201 focuses on comprehensive Advanced Life Support (A.L.S.) preparatory information, pathophysiology, pharmacology, history taking, physical exam, field patient assessment, clinical decision making and

* ASL mode courses are available through the Internet.

airway management and ventilation skills and knowledge.

All didactic, practical and clinical education is based on the cognitive, affective and psychomotor objectives of the 1998 EMT-Paramedic National Standard Curriculum.

**Prerequisite: Current N.Y.S. EMT Certification; Pre-corequisite: BIO 131 Human Biology I. One year of active EMT practice desirable.**

### PMD 202
**Paramedic II** **(14)**

Paramedic II continues to build on all A.L.S. knowledge and skills from PMD 201. The focus of the course is trauma emergencies and specific medical emergencies. Medical emergencies addressed include: pulmonology, cardiology, neurology, endocrinology, allergies and anaphylaxis, gastroenterology, urology, nephrology, hematology, toxicology and substance abuse.

All didactic, practical and clinical education is based on the cognitive, affective and psychomotor objectives of the 1998 EMT-Paramedic National Standard Curriculum.

**Prerequisite: PMD 201 Paramedic I; Pre-corequisite: BIO 132 Human Biology II.**

### PMD 203
**Paramedic III** **(12)**

Paramedic III continues to build on all A.L.S. knowledge and skill from PMD 201 and PMD 202. The focus of the course is completing specific medical emergencies, dealing with special populations of patients, as well as field operational topics. Topics include: environmental emergencies, infectious disease, behavioral emergencies, gynecology, obstetrics, neonatology, pediatrics, geriatrics, abused and assaulted patients, chronic and special need patients, ambulance operations, medical incident command, rescue, hazardous materials, crime scene awareness and rural EMS.

All didactic, practical and clinical education is based on the cognitive, affective and psychomotor objectives of the 1998 EMT-Paramedic National Standard Curriculum.

**Prerequisite: PMD 202 Paramedic II.**

### PMD 204
**Paramedic IV** **(5)**

Meeting weekly, Paramedic IV assures comprehensive review of all necessary paramedic knowledge and skills prior to state and national testing. It provides students with specialty courses including Advanced Cardiac Life Support, Pediatric Advanced Life Support, and advanced trauma care. Clinically, students must successfully complete a minimum of 300 hours of field internship over seen by a senior preceptor and acquire an adequate number of specific patient contacts at the A.L.S. level. Students must have the ability to integrate professional competencies and professional attitudes and consistently demonstrate these abilities.

All didactic, practical, and clinical education is based on the cognitive, affective, and psychomotor objectives of the 1998 EMT-Paramedic National Standard Curriculum.

**Prerequisite: PMD 203 Paramedic III and successful completion of all in-hospital and all phase I, II, and III out of hospital clinical time.**

## POLITICAL SCIENCE

### POS 201
**Introduction to American Government** **(3)**

American political institutions, processes and behavior. The relationships among cultural, legal and social aspects of the political system. Structure, organization and function of political parties, pressure groups and mass media. Application to contemporary issues and events. Satisfies the civic education requirement.

**3 Class Hours**

### POS 203
**International Relations** **(3)**

An examination of basic concepts and principles of world politics: international conflict resolution, international organizations, and the struggle for power. Factors affecting the relationships among the major powers. The role of diplomacy, alliances, war and peace in the world arena.

**3 Class Hours**

### POS 204
**American State and Local Government** **(3)**

Theory and practice of state and local government, utilizing a problem- solving or "policy" approach. Students are encouraged to explore in depth the workings of city and county governments locally. Satisfies the civic education requirement.

**3 Class Hours**

### POS 299
**Independent Study** **(1-3)**

An independent student project which is beyond the scope of courses currently offered by the department, directed by a faculty member with approval of the department chairperson.

**Prerequisite: 3 Semester hours of political science.**

## PSYCHOLOGY

### PSY 100
**Psychology of Personal Adjustment** **(3)**

Investigation of bio-social factors which influence human behavior with emphasis on: (1) development of physical, mental, emotional, social and spiritual well-being; (2) personal responsibility for one's lifestyle and the consequences that flow from one's choices. (This course cannot be used as a prerequisite for other psychology courses.)

**3 Class Hours**

### PSY 110
**General Psychology** **(3)**

Definition and description of psychology. Topics may include functions of neural system, sensation and perception, learning, memory, motivation, emotion, intelligence, personality, social psychology. Methods and statistical applications, history and fields of psychology.

**3 Class Hours**

### PSY 210
**Human Development** **(3)**

Human development from conception through childhood, adolescence, and adulthood. Intellectual growth, personal and social adjustment, the relationship between physical and mental development, and typical problems in various states of the life-cycle are considered. Especially for Nursing students.

**3 Class Hours Prerequisite: PSY 110 General Psychology.**

### PSY 211
**Child Development** **(3)**

The growth, maturation and development of children, including mental and motor phases, learning, motivation and personality formation.

**3 Class Hours; Prerequisite: PSY 110 General Psychology.**

### PSY 212
**Adolescent Development** **(3)**

The developmental tasks of the adolescent years, including physical, cognitive, social, emotional, and moral growth, with considerations from cross-cultural research.

**3 Class Hours; Prerequisite: PSY 110 General Psychology.**

### PSY 214
**Abnormal Psychology** **(3)**

Survey of the normal and abnormal personality with special emphasis on certain causal factors pertaining to maladaptive behavior. A general framework for understanding abnormal behavior patterns, including common misconceptions, accepted definitions, and the classification of mental disorders.

**3 Class Hours; Prerequisite: PSY 110 General Psychology.**

### PSY 217
**Introduction to Counseling Theory and Practice** **(3)**

Varied methods of counseling, employing current theories, situational examples and means for determination of method to be used. Practical cases in social sciences, clinics, hospitals, and educational institutions. Overall training and personality of the counselor.

**3 Class Hours; Prerequisite: PSY 110 General Psychology.**

### PSY 223
**Human Exceptionality and Its Assessment** **(3)**

PSY 223 is a survey of human exceptionality: attention will be focused on the problems, etiologies (causes), and expectancies of exceptional people in their communities, at school, and at home. Topics include persons with learning disabilities, attention-deficit/hyperactivity disorders, emotional disabilities, mental retardation, autism, and people who are gifted, talented, and creative. Special consideration is given to intelligence testing and the placement of atypical learners in special education and inclusive school settings.

**2 Class Hours; Prerequisite: PSY 110 General Psychology**

### PSY 227
**Behavior Modification** **(3)**

A study and survey of the development and especially the application of practical approaches to behavior management and change based on modern learning theories. Special attention will be given to the application of principles of operant and classical learning to all social milieus including behavior change at home, school, rehabilitative, corrective and recreational institutions, and other social settings. Self-control techniques are also discussed.

**3 Class Hours; Prerequisite: PSY 110 General Psychology.**

### PSY 230
**Psychology of Women** **(3)**

A course focusing on the scientific study of female behavior, personality, and the biological, psychological and cultural determinants of women's roles in society.

**3 Class Hours; Prerequisite: PSY 110 General Psychology.**

### PSY 234
**Psychology of Addictions** **(3)**

An overview of the psychology and psychophysiology of the brain and addictions. Addictions to food,

alchohol, sex, gambling, psychopharmaceuticals, over-the-counter medications, and street drugs are introduced. The impact of the addiction cycle on the individual, the family, and society is explored.

**3 Class Hours; Prerequisite: PSY 110 General Psychology.**

### PSY 240
**Psychology of Advertising (3)**

Emphasizes the psychological dimensions of advertising as a basis for attracting and retaining consumer awareness of products, companies, and services. Learning, drive and motivation, and communication theories, as they pertain to the diffusion of media advertising messages, are examined and analyzed using television, radio, print, and Internet media.

**3 Class Hours; Prerequisite: PSY 110 General Psychology.**

### PSY 245
**Social Psychology (3)**

The scientific study of social influences on human behavior. Course emphasizes both the experimental and interpersonal perspectives. Topics include: social influence, attitudes, group behavior, social perception, social cognition, social exchange, aggression, and interpersonal attraction.

**3 Class Hours; Prerequisite: PSY 110 General Psychology.**

### PSY 299
**Independent Study (1-3)**

An individual student project in psychology which is beyond the scope or requirements of the courses offered by the department, conducted under the direction of a faculty member and approved by the department chairperson.

**Prerequisites: PSY 110 General Psychology plus 3 additional hours in a 200 level PSY course.**

## PHYSICAL THERAPIST

### PTA 100
**Introduction to Physical Therapy I (4)**

The history and development of medicine is outlined. The profession of physical therapy is presented with emphasis on the definition of the role and education of the physical therapist assistant. Students acquire basic knowledge of SOAP note writing, medical terminology, health care institutional organization, ethics, medical-legal aspects of patient care, and fiscal considerations involved. Interpersonal skills and professional/patient interactions are discussed.

**4 Class Hours; Corequisite: BIO 131, PHY 118.**

### PTA 101
**Introduction to Physical Therapy II (4)**

This course is a continuation of PTA 100. General concepts of disease and disease processes are discussed. Diseases of selected organs are studied.

**4 Class Hours; Prerequisite: PTA 100; Corequisite: BIO 132.**

### PTA 102
**Introduction to Rehabilitation (4)**

The principles of normal body alignment, body mechanics, posture, balance and movement are presented. Bed positioning, moving and lifting the dependent patient are discussed and demonstrated. Goniometrics, transfer and elevation activities, passive and self range of motion exercises are practiced. The therapeutic gymnasium, wheelchairs and assistive devices are introduced. Architectural barriers are explored. The rehabilitation of the patient with spinal cord injury, cerebrovascular accident and amputation is studied.

**6 Class Hours; Prerequisites: PTA 100, PTA 104, BIO 131, PHY 118; Corequisites: PTA 101, 103.**

### PTA 103
**Physical Agents and Massage (4)**

Basic principles of massage and application of modalities are presented. Specific skills practiced in the laboratory include various massage techniques; use of hot and cold packs, paraffin application; use of whirlpool and contrast baths; use of ultrasound; application of microwave diathermy; use of electrical stimulation; and ultraviolet and infrared radiation therapy techniques. Principles and procedures related to the use of the Hubbard tank, therapeutic pool and intermittent compression are also discussed.

**6 Class Hours; Prerequisites: PTA 100, PTA 104, BIO 131, PHY 118; Corequisite: PTA 101, 102.**

### PTA 104
**Basic Musculoskeletal Anatomy (1)**

Basic bone and muscle anatomy is presented in an interactive environment. Course content is required for success in the Physical Therapy field. This course is a prerequisite for all PTA courses level 101 or higher.

**1 Class Hour; Corequisite: BIO 131.**

### PTA 110
**Clinical Affiliation I (2)**

This course constitutes the student's first clinical affiliation assignment. The student spends three to five work days in one health care facility working under the supervision of a physical therapist. The student is assigned to work with patients requiring treatments with which the student is familiar including simple modalities, simple exercise routines, ambulation and activities of daily living. The student meets with the clinical coordinator several times during the five-week period to assess progress.

**90 Clinical Hours over 3-6 weeks; Prerequisite: successful completion of all freshman level courses.**

### PTA 201
**Kinesiology (4)**

Muscle structure and function are reviewed. Normal human motion is studied. Manual Muscle Testing is studied in the laboratory. Posture and normal gait are reviewed. Pathological gait patterns are presented and analyzed.

**6 Class Hours; Prerequisite: successful completion of all freshman level courses; Corequisite: PTA 202.**

### PTA 202
**Therapeutic Exercise (4)**

The principles and techniques of therapeutic exercise are presented. Specific neurological, medical, surgical and orthopedic conditions are studied. Chest physical therapy including postural drainage is practiced.

**6 Class Hours; Prerequisites: successful completion of all freshman level courses; Corequisite: PTA 201.**

### PTA 210
**Clinical Affiliation II (4)**

This course constitutes the student's second clinical affiliation assignment. The student spends two days in one health care facility working under the supervision of a physical therapist. The student is assigned to work with patients requiring treatments with which the student is familiar including simple modalities, simple exercise routines, ambulation and activities of daily living. The student is also introduced to the patient requiring therapeutic exercise routines which are part of the student's concurrent course work. The student meets with the clinical coordinator during the fifteen-week period to assess progress.

**180 Clinical Hours during 5 weeks; Prerequisite: PTA 110; Corequisite: PTA 201, 202.**

### PTA 213
**Senior Seminar I (5)**

Additional neurological, orthopedic, medical and surgical conditions are presented. Basic principles of testing and complex treatment procedures are included so that the student understands and is aware of how to assist the Physical Therapist. Additional psychosocial issues are also discussed. This course is presented in a seminar format of two to four-hour segments for the first 7 weeks of the semester.

SPECIAL CONSIDERATIONS: This course may be presented by guest lecturers and sessions may be held off campus in various health care facilities depending upon the particular topic. Significant preparation time outside of regular class hours is required.

**75 Class Hours during 7 weeks; Prerequisites: PTA 201, 202, 210.**

### PTA 220
**Clinical Affiliation III (6)**

This course constitutes the student's final clinical affiliation assignment. The student works full-time in one health care facility for a period of six weeks under the supervision of a physical therapist. The student is assigned to work with all types of patients requiring treatments with which the student is familiar including all modalities, exercise routines, gait training and activities of daily living. The student meets with the clinical coordinator several times during the six-week period to assess progress.

**240 Clinical Hours during 6 weeks; Prerequisites: PTA 210, 213.**

### PTA 224
**Senior Seminar II (1)**

This final course of the student's academic career is designed to allow students to integrate their theoretical knowledge and their clinical experience. Students meet in seminar format and present case studies based on their clinical experience. If time permits special topics are presented and discussed. In addition a student/teacher conference is required for each student prior to graduation. Course meets three hours per day, three days per week during final two weeks of the semester.

**9 Class Hours for 2 weeks; Prerequisites: PTA 213, 220.**

### PTA 299
**Independent Study (1- 4)**

Course content covering advanced work in Physical Therapist Assistance on which the instructor and student agree. The material is beyond the scope of an ordinary course and it must be approved by the department chairperson. Conducted under the direction of a faculty member.

**Prerequisite: Department approval.**

## RADIOLOGIC

### RAD 100
**Introduction to Clinical Education (4)**

Overview of radiologic technology through the study of its historical development, its placement in the medical field today, the organization of a modern radiology department, professional ethics, medicolegal aspects of

radiology and medical terminology. Introduction and orientation to the Radiology department in an affiliating hospital during the last five weeks of the semester and during intercession.

**3 Class Hours, 160 Clinical Hours.**

### RAD 101
**Image Production and Evaluation I** **(3)**

Introduction to the basic principles of radiographic imaging including recording media, processing methods, radiographic quality and radiographic accessories. Lecture and laboratory are coordinated to enhance these fundamental concepts.

**3 Class Hours, 1 Laboratory Hour.**

### RAD 102W
**Image Production and Evaluation II** **(4)**

Advanced study of the factors contributing to the radiographic image and evaluation. Writing Emphasis Course.

**4 Class Hours, 1 Laboratory Hour; Prerequisite: RAD 101 Image Production and Evaluation I or permission of instructor.**

### RAD 103
**Positioning I** **(2)**

Instruction and practice in radiographic positioning or the appendicular skeleton.

**1 Class Hour; 5 Laboratory Hours.**

### RAD 104
**Positioning II** **(1)**

Instruction and practice in radiographic positioning of the axial skeleton.

**1 Class Hour; 2 Laboratory Hours; Prerequisite: RAD 100 Introduction to Clinical Education.**

### RAD 110
**Methods of Patient Care** **(1)**

Patient care procedures routinely performed in the radiology department.

**1 Class Hour, 1 Laboratory Hour.**

### RAD 115
**Radiation Protection** **(1)**

Basic radiation protection for the student radiographer.

**1 Class Hour**

### RAD 132
**Clinical Education II** **(2)**

Observation and clinical experience for the development of competency involving elementary radiographic procedures in an affiliated hospital.

**240 Clinical Hours; Prerequisite: RAD 100 Introduction to Clinical Education or permission of instructor.**

### RAD 133
**Summer Clinical Education III (Summer Term I)** **(4)**

Clinical experience for development of competency involving general radiographic procedures in an affiliated site.

**440 Clinical Hours; Prerequisites: RAD 132 Clinical Education II and BIO 132 Human Biology II or permission of instructor.**

### RAD 201
**Equipment Operation and Maintenance** **(3)**

Principles and operation of radiographic imaging equipment, tube design, X-ray circuitry, mobile equipment, image intensification, and digital radiography/fluoroscopy.

**3 Class Hours; Prerequisites: RAD 102 Image Production and Evaluation II.**

### RAD 204
**Advanced Positioning** **(2)**

Instruction and practice in positioning techniques involving the skull, facial bones, and advanced radiographic procedures.

**1 Class Hour; 2 Laboratory Hours; Prerequisite: RAD 133 Clinical Education III or permission of instructor.**

### RAD 214
**Sectional Anatomy** **(1)**

An introduction to cross sectional anatomy and its relationship to structures visualized in computed tomography, magnetic resonance imaging and sonography.

**1 Class Hour; Prerequisite: BIO 132 Human Biology II.**

### RAD 216
**Imaging Modalities** **(1)**

Introduction to the principles of computerized axial tomography, nuclear medicine, magnetic resonance imaging, and ultrasound.

**1 Class Hour; Prerequisite: RAD 102 Image Production and Evaluation II and CST 105 Computer Applications or permission of instructor.**

### RAD 220
**Radiologic Pathology** **(2)**

A presentation of the various medical and surgical diseases and their relationship to radiographic procedures.

**2 Class Hours; Prerequisite: BIO 132 Human Biology II or permission of instructor.**

### RAD 225W
**Advanced Imaging Procedures** **(3)**

An overview of advanced imaging procedures such as: equipment, the use of computers in imaging, responsibilities of the radiographer, and the care of the patient. The use of body systems-based approach to imaging procedures. Writing Emphasis Course.

**3 Class Hours; Prerequisite: RAD 230 Clinical Education IV or permission of instructor.**

### RAD 230
**Clinical Education IV** **(4)**

Practical application of advanced positioning techniques in an affiliating site. This will also include 40 hours/2 weeks of clinical assignment during the Winter Term.

**440 Clinical Hours; Prerequisite: RAD 133 Summer Clinical Education III or permission of instructor.**

### RAD 232
**Clinical Education V** **(3)**

Application of advanced radiographic procedures including evening assignments in an affiliated hospital.

**360 Clinical Hours; Prerequisite: RAD 230 clinical Education IV or permission of instructor.**

### RAD 245
**Radiobiology** **(2)**

Radiobiology and advanced radiation protection procedures related to diagnostic and therapeutic uses of radiation.

**2 Class Hours; Prerequisite: RAD 201 Equipment Operation and Maintenance or permission of instructor.**

### RAD 250
**Quality Assurance** **(2)**

The basic principles and techniques of quality assurance testing presented and illustrated through laboratory experiments. Major emphasis on the tests and measurements used to analyze imaging systems with minimum information loss.

**2 Class Hours, 1 Laboratory Hour; Prerequisite: RAD 201 Equipment Operation and Maintenance or permission of instructor.**

### RAD 262
**Mammography** **(0.5-3)**

Individual modules consisting of 1) patient education and assessment, 2) anatomy, physiology, and pathology of the breast, 3) positioning and image evaluation, 4) mammographic technique, and 5) instrumentation and quality assurance. Preparation for the A.A.R.T. registry examination.

**3 Class Hours**

### RAD 264
**Computed Tomography** **(3)**

Introduction to the field of Computed Tomography for the radiographer.

**3 Class Hours**

### RAD 266
**Magnetic Resonance Imaging** **(3)**

Magnetic resonance imaging for the radiographer.

**3 Class Hours**

### RAD 295
**Seminar in Radiography** **(2)**

Preparation of the technical report and its organization for both written and oral presentation. Readings in current literature and journals.

**2 Class Hours; Prerequisite: Senior Year Status.**

### RAD 298
**Independent Clinical Study** **(1-2)**

A one-time individual student clinical experience to be conducted under the direction of a clinical instructor and approved by the department chairperson.

### RAD 299
**Independent Study** **(1-3)**

An individual student project concerned with advanced work in a specific area of radiography. Independent study is concerned with material beyond the scope and depth of courses currently offered by the department. Conducted under the direction of a faculty member.

**Prerequisite: Department Chairperson approval.**

## READING SKILLS

### RDG 090
**Reading Fundamentals** **(0)**

A non-credit course involving individual diagnosis of student's reading strengths and weaknesses, and development and implementation of program to upgrade basic skills. Content to vary with individual student.

**4 Class Hours, 4 credit - equivalents.**

### RDG 092
**College Preparatory Reading (0)**

A course emphasizing vocabulary expansion, inferential and critical comprehension, and flexible rate. Instruction and practice of reading skills to specific content areas.

**4 Class Hours, 4 credit - equivalents.**

### RDG 094
**College Vocabulary Skills (0)**

Designed to provide students with several methods of mastering vocabulary encountered in college courses. Students will review dictionary skills. Learn to infer meanings from context, structural analysis, and methods of studying vocabulary for examinations. In-class practice will be designed to fit students' individual needs.

**2 Class Hours for 8 Weeks.**

### RDG 110
**Efficient Reading (1)**

Development of skills characteristic of the mature reader. Examination of structure of material, emphasis on identification of purpose, flexibility of rate.

**2 Class Hours for 10 Weeks; Course starts at beginning of third week of semester.**

### RDG 120
**Critical Reading (3)**

Emphasis is on critical reading and thinking skills. Students will analyze and evaluate college level readings beyond the literal level. Critical thinking skills will also be applied to the mastery of content area text material.

**3 Class Hours**

## RUSSIAN

### RUS 101/102
**Beginning Russian I & II (4)**

Basic principles of grammar and syntax. Reading and discussion of graded literary and cultural texts.

**4 Class Hours, I Laboratory Hour.**

### RUS 201
**Intermediate Russian I (3)**

Review of grammar and its application to spoken and written Russian. Reading of literary and cultural texts.

**3 Class Hours**

### RUS 202
**Intermediate Russian II (3)**

Continuation of RUS 201.

**3 Class Hours**

## STUDENT AFFAIRS COURSES

### SAC 101
**The Individual in a Changing Environment (3)**

Individual interaction and reading designed to foster understanding and application of psychological and emotional growth within the many environments we are part of. Basic class material is the individual and group analysis of student's experience within an immediate unstructured setting. Focus on analysis and organization of experience into a personally rewarding conception of growth. Individual self-development projects outside the class.

**3 Class Hours**

### SAC 110
**Orientation for International Students (2)**

An orientation course for international students designed to aid in their adjustment as students at Broome Community College. Study skills, academic regulations, the American educational system, individual educational and vocational goals, American customs. Especially intended for students during their initial semester of enrollment in conjunction with English-as-a-Second-Language course offerings, such as ESL 103, 104, 106. (This course is not acceptable for credits toward a degree.)

**2 Class Hours**

### SAC 250
**Career Exploration (3)**

How to plan, establish, change a career. The process of deciding on a career and implementing career goals, assessment of values, interests and skills plus their relationship to occupations. Analysis of the labor market needs, identification of employers and sources of occupation information, the means of securing employment through proposals, resumes, applications and job interviews. Supportive small group atmosphere. Class activities include discussion, speakers, testing, and individual counseling within career development theory.

**3 Class Hours**

### SAC 251
**Career Search (1)**

For people who know their interests, skills, and values but are not sure which career field or lifestyles would be most satisfying to them. Sources of occupational information, analysis of labor market needs, what colleges and college majors best prepare students for their career goals. For students who are beginning a career, changing careers, or returning to the job market. For students who scored 13-18 on My Vocational Situation. Supporting small group atmosphere. Discussion sessions, speakers, testing field work, and individual counseling.

**2 Seminar Hours**

### SAC 295
**Seminar in Human Potential (3)**

Human Potential seminar centers on the person within a positive group setting while working on and with the potential of all involved. It assists persons in achieving the following: becoming more self-directed, self-motivating, self-aware, self-controlled, self-disciplined and empathetic toward others. The focus is on developing the person's own resources by utilizing specific and structured procedures.

**3 Class Hours**

## STUDY ABROAD

### SAP 115
**Semester Abroad (15)**

Students studying overseas for a semester are registered for this course before departure. It signifies a full semester of study rather than a particular course. Once students register abroad, SAP 115 is dropped and replaced by the actual courses enrolled in. All SAP and O__ __ designators indicate courses taken in a BCC sponsored program overseas and are assigned regular letter grades.

**Prerequisites: see page 29.**

### SAP 171-75
**Tropical Wildlife Studies (2-4)**

Offered by the Biology department for non-science majors. This course is for students with an interest in wildlife, nature, and the outdoors. The course is offered in different locations aboard during the intersessions, or summer for a period of two to four weeks. Credit is variable depending upon the time spent abroad and the work involved. Recent locations have included The U.S. Virgin Islands, Kenya, Australia, and the Galapagos Islands, Ecuador. Lectures, readings, and field work concentrate on the ecology of the region.

**Prerequisite: Special application necessary.**

## SOCIOLOGY

### SOC 110
**Introduction to Sociology (3)**

Sociological facts and principles dealing with the scientific study of human relationships. Emphasis on analysis and study of culture and human society, socialization, groups and group structures, collective behavioral patterns and the concept of social institutions. Initial experiences for students who desire an introduction to the sociological perspective.

**3 Class Hours**

### SOC 111
**Social Problems (3)**

The sociology of social and urban problems. Topics may include crime, population, inequality, discrimination, mental illness, attitudes toward work, social control and the dynamics of social change. Students should be aware that individual instructors approach these problems in different ways, depending on students' and instructors' interests. SOC 110 Introduction to Sociology is recommended as an initial experience. Satisfies the civic education requirement.

**3 Class Hours**

### SOC 230
**The Family/Marriage and its Alternatives (3)**

Social and personal factors which make for adequate family functioning, the forms the family takes, its internal processes and the functions it serves in society. Covers systematically the important theoretical and experimental ground on those issues relevant to both the scholarly and practice-minded student.

**3 Class Hours**

### SOC 250
**Introduction to Social Work (3)**

Social work as a profession in the context of the social welfare institution; historical and philosophical roots of social work and social welfare; attributes of the social work role; social workers' knowledge base; fields of social work practice.

**3 Class Hours; Prerequisites: SOC 110 Introduction to Sociology and PSY 110 General Psychology.**

### SOC 299
**Independent Study (1-3)**

An individual student project in sociology which is beyond the scope or requirements of the courses offered by the department, conducted under the direction of a faculty member and approved by the department chairperson.

**Prerequisite: 3 Semester Hours in Sociology.**

## SOCIAL SCIENCE

### SOS 101
**Contemporary World Issues (3)**

An introduction to the ideas, methods, and materials (print, visual, and electronic) used in various social science fields, including history, political science, sociology, economics, anthropology, and geography. Topics will cover selected modern global issues such

as that will change each semester, but which will focus on underlying issues of globalism, pluralism, democratic aspirations, and equity. Additional topics may cover issues in population, human rights, natural resources, development, conflict resolution, and cooperation. Intended for beginning liberal arts students who will take social science courses In the future. Daily newspaper reading is a core activity.

**3 Class Hours**

### SOS 111
**Public Policy (3)**

Contemporary political issues examined in the context of American democratic institutions, practices, and beliefs. Focus on policy issues involving energy/environment, criminal justice, education, health care, and welfare. Satisfies the civic education requirement.

**3 Class Hours**

### SOS 116
**International Business Environments (3)**

An overview of the social, cultural, political, and economic factors that influence the trade related interaction of nations and the operations of global business enterprises. Trade theory, economic integration, global sourcing, export-import basics, cultural awareness, and other current topics relating to international business will be covered.

**3 Class Hours - Cross-listed as BUS 116.**

### SOS 120
**Science Technology and Democratic Society (3)**

A study of the interaction of the forces of science and technology with the major institutions (i.e., govt., industry, family, education, and organized religion) of contemporary democratic society. Analysis of differing viewpoints on the role of a scientific technology with respect to key public policy issues (i.e., genetic engineering, fetal tissue research, pollution, space exploration, information management, weapons development, evolution/creationism debate, communications, etc.). Satisfies the Civic Education requirement.

**3 Class Hours**

### SOS 127
**Introduction to Conflict Resolution and Mediation (3)**

This course will explore the dynamics of conflict and the theory of alternative dispute resolution methods; how communication skills enhance resolution or escalate conflict; an examination of various approaches to the resolution of conflict. A major emphasis will be on the principles of mediation and skills required for effective mediation practice thus much of the course will require active class participation, including role play.

**3 Class Hours**

### SOS 155
**Media and Society (3)**

An in-depth examination and analysis of the impacts and effects of the mass media upon society and the converse societal influences upon the media. Includes such issues as media concentration, portrayal of violence, stereotyping, the public's right to know, among others.

**Prerequisite: COM 100 or SOC 110.**

## SPANISH

### SPA 101, 102
**Beginning Spanish (4, 4)**

This is a comprehension-based foundation course. Special emphasis is placed on the development of listening comprehension. Reading, writing and speaking skills emerge through practice in and out of class.

**4 Class Hours; Prerequisite: SPA 101 Beginning Spanish for SPA 102.**

### SPA 115
**Conversational Spanish for Law Enforcement (3)**

This course is designed specifically for individuals who are in law enforcement. The instruction will focus on specific, oral-aural, work-related Spanish and cross-cultural studies.

### SPA 116
**Spanish for Business (3)**

In doing business in Latin American, students learn basic Spanish phrases and questions necessary to carry out travel for business purposes. Discussions also cover 50 important cross-cultural issues pertinent to relationships between non-Hispanics business persons and Hispanics business leaders in Latin America.

### SPA 201
**Intermediate Spanish I (3)**

Review and continuation of grammar and syntax will be emphasized through writing, reading and conversation on Spanish and Latin American literary works of recognized authors.

**3 Class Hours; Prerequisite: SPA 102 Beginning Spanish.**

### SPA 202
**Intermediate Spanish II (3)**

Second course of a cultural, conversational and literary approach to Spanish language. Students will have the opportunity to discuss and analyze a wide variety of topics, while reviewing and continuing to explore the grammar and syntax of the Spanish language.

**3 Class Hours; Prerequisite: SPA 201 Intermediate Spanish I.**

### SPA 203
**Spanish in Conversation (3)**

This conversational class will intensively emphasize oral practice in the classroom through a wide variety of topics.

**3 Class Hours; Prerequisite: SPA 202 Intermediate Spanish II or its equivalent.**

### SPA 204
**Spanish Through Its Literature: A Contact Zone (3)**

To talk about literature is also to talk about history, culture, and experience. This course will attempt to explore the ways in which Latin American/Hispanic writers have made connections between literature and history, literature and culture, literature and experience. One of the objectives of this course is to provide students an opportunity to examine the social, historical, and culture context(s) in which Latin American/Hispanic literature is produced. That is, to open a space, a "contact zone," that will allow students to relate not only with the Spanish language but also with its literary production, its culture and its history.

**3 Class Hours**

### SPA 207
**Introduction to Latin American Literature: from the Conquest to Testimonial Narrative (3)**

An introductory survey of Latin Americas literary production with special attention to historical and social contexts. The course will include selected readings reflecting historical developments of Latin American literature from the Conquest to the "Boom" to Testimonial Narrative. The selections to be read will include works by Colón, Guamán Poma de Ayala, Bartolomé de las Casas, Gabriel García Márquez, Elena Poniatowska, Laura Esquivel, Isabel Allende, Vargas Llosa, Cortázar, and Carmen Cecilia Suárez.

**3 Class Hours**

## SPEECH

### SPK 106
**English Speech Communication for Speakers of Other Languages (3)**

This course is designed for international students as a bridge between ESL 114 and SPK 110. There will be some practice in articulation, pronunciation, and vocabulary, but the emphasis of the course will be on introducing various public speaking skills and providing exercises that will help students feel comfortable using English to communicate a specific idea in front of a group.

### SPK 110
**Effective Speaking (3)**

Speech communication through voice, words, and action. Voice production, diction, platform presence. Organization of ideas. Practice in presenting speeches of different types.

**3 Class Hours**

### SPK 203
**Advanced Speaking (3)**

Designed so students can review what they have learned in SPK 110 Effective Speaking, learn advanced techniques for informative and persuasive speaking, learn techniques for special speaking occasions. Involvement in a debate as a means of perfecting research techniques, impromptu speaking skills and the processes of logical thinking and organizing.

**3 Class Hours; Prerequisite: SPK 110 Effective Speaking.**

### SPK 299
**Independent Study: Speech (1-3)**

An individual student project concerned with advanced work in a specific area of speech. Conducted under the directions of a faculty member, independent study is concerned with material beyond the scope and depth of the ordinary course.

**Prerequisite: 3 Semester hours of college level work in Speech.**

## QUALITY ASSURANCE

### SQC 100/200
**Orientation (0)**

Guest speakers discuss common problems quality assurance students encounter. Student contact with industry is established through field trips.

**1 Class Hour**

### SQC 111
**Acceptance Sampling Techniques (3)**

A thorough study of acceptance sampling techniques for attributes and variables. Operating Characteristic curves, lot-by-lot acceptance plans based on LTPD,

AOQL and AQL. Dodge-Romig, MIL-STD 105D, sequential probability ratio test (SPRT), sequential sampling, continuous sampling, MIL-STD 414.

**3 Class Hours; Prerequisite: MAT 124 Statistics I.**

### SQC 112
**Metrology** **(3)**

The study of the science of measurement. This course will deal with the principles and practice of precision measurement. Topics to include fixed gages, micrometers, verniers, thread gaging, comparison measurement, optical measuring instruments, calibration and angle measurement.

**3 Class Hours; Prerequisite: MAT 124 Statistics I or MAT 136 College Algebra and Trigonometry.**

### SQC 113
**Statistical Process Control** **(3)**

A thorough study of process capability analysis and control chart procedures. Capability Indices, control charts for attributes, p, np, c, u, d. Short-run control charts. Control charts for variables x, R, S. Distinctions made between process capability and process control.

**3 Class Hours; Prerequisite: MAT 124 Statistics I.**

### SQC 220
**Senior Practicum** **(3)**

This course is designed to allow students to integrate their theoretical knowledge with real world situations. Working in teams, students are assigned to case studies involving actual or fictitious data. The course emphasizes computer usage, classroom presentations, and written reports. ISO 9000 Standards and problem solving techniques including Pareto diagrams, process flowcharts, check sheets, brainstorming, cause-and-effect diagrams, and multi-voting schemes are discussed.

**3 Class Hours; Prerequisites: SQC 111 Acceptance Sampling Techniques, SQC 112 Metrology, SQC 113 Statistical Process Control, MAT 224 Statistics II, MAT 245 Design of Experiments; Corequisite: SQC 244 Reliability and Life Testing.**

### SQC 244
**Reliability and Life Testing** **(3)**

Fundamentals of probability, probability distributions, discrete distributions: binomial, hypergeometric, Poisson, Pascal, continuous distributions: normal, exponential, gamma, log-normal, Weibull. Introduction to reliability, failure rate, MTBF, MTTF, mean life, probability of survival for series systems and parallel redundant systems, basics of life testing based on preassigned number of failures and preassigned time, SPRT, maintainability, availability, and MTTR.

**3 Class Hours; Prerequisite: MAT 124 Statistics I.**

### SQC 297
**Cooperative Work Experience** **(1-3)**

Cooperative education in Quality Assurance may be available. On-the-job experience may be obtained in an industrial setting whose operations require process control, statistical analysis, problem solving skills, or other tools of Quality Assurance. To be eligible, a student must maintain a cumulative grade point average of at least 2.5 with a minimum of 3.0 in MAT and SQC courses, have no "F" grades, and exhibit responsibility through SQC 100/200 orientation.

**Prerequisite: Placement by advisor.**

## TECHNOLOGY

### TEC 100
**Introduction to Technology** **(0.5)**

Introduction to Technology, career opportunities, transfer opportunities, study skills and college services. An association with industry is established through field trips and panel discussions involving industry personnel. Reasonable proficiency in the use of the hand held calculator is developed.

**1 Laboratory Hour**

## THEATER

### THR 101
**Theater Appreciation: The Image Makers** **(3)**

This course surveys the history and evolution of drama from Ancient Greece to the present time, emphasizing all aspects of the art form including playwriting, acting, directing, scene design, and an analysis of dramatic literature. Attendance at local productions is required. (Students taking this course may also be interested in LIT 230 American Drama, LIT 233 World Drama.)

**3 Class Hours**

### THR 102
**Introduction to Musical Theatre** **(3)**

Chronological history of American Musical Theatre (with contemporary British additions) from 19th century minstrelsy, melodrama, vaudeville and burlesque to the present day Broadway musical. Interaction of composer, lyricist, librettist, director, choreographer, performers and technicians. Illustrated by films, slides and live performances.

**3 Class Hours**

### THR 109, 110
**Practicum Theater** **(3)**

Stage design and construction techniques are studied as students engage in problem solution, system design and assist with theater department productions. Problems in construction and use of theater equipment and facilities; movable scenery and nonpermanent stage equipment; sound and lighting systems. Lecture, discussion, studio work.

### THR 111
**Introduction to Acting** **(3)**

Fundamental principles of acting technique are introduced. Exercises for body and voice are practiced as well as the skills of concentration, improvisation, imagination, sense memory, objectives, action, obstacles and circumstances. Excellent for students in programs other than theater who wish to explore how acting techniques can enhance their work.

### THR 112
**Acting II** **(3)**

This is an intermediate course for those who wish to continue the study of the acting process in greater depth. Method and classical approaches are employed for an actor's approach to a role; text and character analysis of various dramatic genres. Students work with the works of major playwrights including Shakespeare.

**Prerequisite: THR 111 or consent of Coordinator.**

### THR 114
**Oral Interpretation** **(3)**

Oral presentation of prose, poetry, drama, and comedy performed individually and in groups.

**3 Class Hours**

### THR 117
**Creative Dramatics** **(3)**

Fundamentals of creative dramatics, its use in teaching, recreation and rehabilitation. Introduction to techniques used and practical application opportunities.

**3 Class Hours**

### THR 140
**Announcing for Radio/TV** **(3)**

Presentation as on-air personality. Development of visual and vocal techniques relating to presentation of news, interviews, commercials and announcements.

**3 Class Hours**

### THR 151
**Technical Production I** **(3)**

Classroom and workshop study relative to technical elements of theater production. All aspects are introduced and can be practiced including costume design and construction, stage lighting design and mechanics, sound design, props and stage management. Lecture, discussion and studio work on theater department productions.

**3 Class Hours**

### THR 152
**Technical Production II** **(1 to 4)**

Classroom and workshop study relative to technical elements of theater production. Particular emphasis is on stage management, house management, props and operation of stage crews. Lecture, discussion and studio work on theater department productions.

### THR 161
**Playwriting** **(3)**

Students will practice writing for the stage in a format of lecture/seminar and workshop. Playwriting involves elements of dramatic action, character, plot, structure, story, style, conflict and staging suitability.

### THR 165
**Dance for Actors I** **(1)**

Basic dance techniques, dance characterization, and movement relative to performance in musical theatre.

**8 Class Hours, 22 Laboratory Hours**

### THR 175
**Dance for Actors II** **(1)**

Intensive dance techniques, dance characterization, and movement relative to performance in musical theatre.

**8 Class Hours, 22 Laboratory Hours**

### THR 201, 202
**Children's Theater** **(3, 3)**

Touring children's theater company during academic year. Performances at area elementary schools for classtime and assembly programs. Visiting with students pre/post production. Design and construction of costumes, sets, and properties. Analysis of children-oriented plays, development of scripts, rehearsal and performance.

**3 Class Hours Each**

### THR 218
**Acting III** **(3)**

The purpose is to serve interested students who wish to continue the study of acting in greater depth. More advanced acting methods and styles are explored and practiced. Scene presentations are required along with accompanying written analysis.

**Prerequisites: THR 111 and THR 112 or permission of Coordinator.**

### THR 219
**Periods and Styles of Acting** (3)

Study and practice of period and contemporary styles of acting.

**Prerequisites: THR 111 and THR 112.**

### THR 221
**History of the Theatre** (3)

History of theatrical production with selected periods of theater activity as a mirror of social and cultural experience from ancient times to the present.

### THR 231
**Stage Direction** (3)

Director's art is examined in relation to the physical space, the actors and the texts. Casting, pictorial emphasis, harmony, rhythm and rehearsal and production procedures are covered. Students will direct a scene or one-act play.

**Prerequisites: THR 111, THR 112 or consent of Coordinator.**

### THR 246, 256
**Rehearsal and Performance for Stage** (3,3)

Casting, rehearsing and acting in made-for-stage drama and comedy scripts.

**3 Class Hours Each; Prerequisite: Permission of Instructor.**

### THR 255
**Improvisational Acting/Psychodrama** (3)

Spontaneously developed acting sequences to mirror real-life situations. Techniques of character interaction with audiences. Performances at agencies, schools and pertinent organizations.

**3 Class Hours**

### THR 266
**Acting for TV, Film and Commercials** (3)

Proficiency in performing before the camera. Character analysis, quick study, re-takes, voice-overs, studio projection, facial nuances, and subtlety of mannerism.

**2 Class Hours, 2 Studio Hours.**

### THR 276
**Rehearsal and Performance for Television** (3)

Casting, rehearsing, and acting in made-for-television drama and comedy scripts.

**3 Class Hours; Prerequisite: Permission of Instructor.**

### THR 286
**Shakespeare for Actors** (3)

A beginning course in the actor's approach to working with Shakespeare's characters, language and themes for monologues and scene study. Students will explore their skills in movement, voice, text analysis and action as it relates to bringing Shakespeare's characters and plays to life.

**Prerequisites: THR 111 or THR 112 or consent of Coordinator.**

**3 Class Hours**

### THR 299
**Independent Study: Theater** (1-3)

An individual student project concerned with advanced work in a specific area of theater. Conducted under the direction of a faculty member, independent study is concerned with material beyond the scope and depth of the ordinary course.

**Prerequisite: 3 Semester hours of college level work in theater.**

## TELECOMMUNICATIONS

### TLC 110
**Telecommunications I** (4)

An introduction to the techniques, principles, and terminology of voice communications. Telecommunication equipment will be presented and the frequency spectrum, modulation and multiplexing techniques explored.

**4 Class Hours; Prerequisite: EET 125 DC Circuits, CST 106 Computer Applications.**

### TLC 120
**Telecommunications II** (4)

An introduction to the techniques, principles, and terminology of data communications. Data commmunication equipment, multiplexing and transmission technology will be demonstrated. Lectures, interactive learning, and demonstrations will be employed.

**4 Class Hours; Prerequisite: TLC 110 Telecommunications I.**

### TLC 210
**Telecommunications III** (4)

An introduction to the technology and terminology of Local Area Networks. The topologies, transmission media, network interfaces and access method will be examined. Lectures, interactive learning, and demonstrations will be employed.

**3 Class Hours; 2 Laboratory Hours; Prerequisite: TLC 120 Telecommunications II.**

### TLC 220
**Telecommunications IV** (4)

A survey of current and emerging technologies in Telecommunications. Lectures, interactive learning, demonstrations, and site visits will be employed. Topics include packet, frame relay, switched video, ISDN, wireless communications, and other transmission mediums.

**3 Class Hours; 2 Laboratory Hours; Prerequisite: TLC 120 Telecommunications II.**



# College Organization

# Part 4


State University of New York .....155
College Board of Trustees .....156
Sponsor, Administration .....157
Staff Listing .....158-166
Index .....167-169
Academic Calendar .....170
Map of Campus .....Inside Back Cover

# State University of New York

Broome Community College is one of the 64 colleges that comprises the State University of New York (SUNY), which was established by the State Legislature in 1948. The 64 units include 30 locally-sponsored two-year community colleges like Broome.

State University's 64 geographically dispersed campuses bring educational opportunity within commuting distance of virtually all New York citizens and comprise the nation's largest, centrally managed system of public higher education.

When founded in 1948, the University consolidated 29 State-operated, but unaffiliated, institutions. In response to need, the University has grown to a point where its impact is felt educationally, culturally, and economically, the length and breadth of the State.

More than 400,000 students are pursuing traditional study in classrooms or are working at home, at their own pace, through such innovative institutions as Empire State College, whose students follow individualized and often non-traditional paths to a degree. Of the total enrollment, approximately 36 percent of the students are 25 years or older, reflecting State University's services to specific constituencies, such as refresher courses for the professional community, continuing educational opportunities for returning service personnel, and personal enrichment for more mature persons.

State University's research contributions are helping to solve some of modern society's most urgent problems. It was a State University scientist who first warned the world of potentially harmful mercury deposits in canned fish, and another who made the connection between automobiles and industrial exhaust combining to cause changes in weather patterns. Other University researchers continue important studies in such wide-ranging areas as immunology, marine biology, sickle-cell anemia, and organ transplantation.

More than 1,000 Public Service activities are currently being pursued on State University campuses. Examples of these efforts include special training courses for local government personnel, State civil service personnel, and the unemployed; participation by campus personnel in joint community planning or project work, and campus-community arrangement for community use of campus facilities.

A distinguished faculty includes nationally and internationally recognized figures in all the major disciplines. Their efforts are recognized each year in the form of such prestigious awards as Fulbright-Hays, Guggenheim, and Danforth Fellowships.

The University offers a wide diversity of what are considered the more conventional career fields, such as business, engineering, medicine, teaching, literature, dairy farming, medical technology, accounting, social work, forestry, and automotive technology. Additionally, its responsiveness to progress in all areas of learning and to tomorrow's developing societal needs has resulted in concentrations which include the environment, urban studies, computer science, immunology, preservation of national resources, and microbiology.

Overall, at its EOC's, two-year colleges, four-year campuses and university and medical centers, the University offers more than 4,000 academic programs. Degree opportunities range from two-year associate programs to doctoral studies offered at 12 senior campuses.

The 30 two-year community colleges operating under the program of State University play a unique role in the expansion of educational opportunity. They provide local industry with trained technicians in a wide variety of occupational curriculums, and offer transfer options to students who wish to go on and earn advanced degrees.

The University passed a major milestone in 1985 when it graduated its one-millionth alumnus. The majority of SUNY graduates pursue careers in communities across the State.

State University is governed by a Board of Trustees, appointed by the Governor, which directly determines the policies to be followed by the 34 State-supported campuses. Community colleges have their own local boards of trustees whose relationship to the SUNY Board is defined by law. The State contributes one-third to 40 percent of their operating costs and one-half of their capital costs.

The State University motto is: "To Learn — To Search — To Serve."

Colleges of the

# State University of New York

## Community Colleges

*(Locally-sponsored, two-year colleges under the program of State University)*

Adirondack Community College at Glens Falls
Broome Community College at Binghamton
Cayuga County Community College at Auburn
Clinton Community College at Plattsburgh
Columbia-Greene Community College at Hudson
Community College of the Finger Lakes at Canandaigua
Corning Community College at Corning
Dutchess Community College at Poughkeepsie
Erie Community College at Williamsville, Buffalo, and Orchard Park
Fashion Institute of Technology of New York City
Fulton-Montgomery Community College at Johnstown
Genesee Community College at Batavia
Herkimer County Community College at Herkimer
Hudson Valley Community College at Troy
Jamestown Community College at Jamestown
Jefferson Community College at Watertown
Mohawk Valley Community College at Utica
Monroe Community College at Rochester
Nassau Community College at Garden City
Niagara County Community College at Sanborn
North Country Community College at Saranac Lake
Onondaga Community College at Syracuse
Orange County Community College at Middletown
Rockland Community College at Suffern
Schenectady County Community College at Schenectady
Suffolk County Community College at Selden, Riverhead, and Brentwood
Sullivan County Community College at Loch Sheldrake
Tompkins Cortland Community College at Dryden
Ulster County Community College at Stone Bridge
Westchester Community College at Valhalla

## State-Operated Colleges

### University Centers

State University of New York at Albany
State University of New York at Binghamton
State University of New York at Buffalo
State University of New York at Stony Brook

## Colleges of Arts and Sciences

State University College at Brockport
State University College at Buffalo
State University College at Cortland
State University of New York Empire State College
State University College at Fredonia
State University College at Geneseo
State University College at New Paltz
State University College at Old Westbury
State University College at Oneonta
State University College at Oswego
State University College at Plattsburgh
State University College at Potsdam
State University College at Purchase

### Colleges and Centers for the Health Sciences

Health Sciences Center at Brooklyn
Upstate Medical University
College of Optometry at New York City
(Health Sciences Center at Buffalo)[1]
(Health Sciences Center at Stony Brook)[1]

### Colleges of Technology

State University of New York College of Technology at Alfred
State University of New York College of Technology at Canton
State University of New York College of Agriculture and Technology at Cobleskill
State University of New York College of Technology at Delhi
State University of New York College of Technology at Farmingdale
State University of New York College of Agriculture and Technology at Morrisville
State University of New York College of Technology at Utica/Rome[2]
(Upper Division and master's programs)

### Specialized College

State University of New York College of Environmental Science and Forestry at Syracuse
State University of New York Maritime College at Fort Schuyler

### Statutory Colleges

New York State College of Agriculture and Life Sciences at Cornell University
New York State College of Ceramics at Alfred University
New York State College of Human Ecology at Cornell University
New York State College School of Industrial and Labor Relations at Cornell University
New York State College of Veterinary Medicine at Cornell University

## State University of New York

Chancellor
Robert L. King

Vice Chancellor and Chief Operating Officer
Richard P. Miller, Jr.

Vice Chancellor and Secretary of the University
John O'Connor

Provost and Vice Chancellor for Academic Affairs
Dr. Peter Salins

**Office of the Secretary of the University**

State University of New York, State University Plaza, Albany, New York 12246 (518)443-5157

## Board of Trustees

Chair: Thomas F. Egan, Rye
Vice Chair: Randy A. Daniels
Steven L. Alfasi
Aminy I. Audi
Edward F. Cox
Father John J. Cremins
Candace de Russy
Gordon R. Gross
Daniel J. Hogarty, Jr.
Lou Howard
Pamela R. Jacobs
George H. Pape, Jr.
Celine R. Paquette
Patricia E. Stevens
Harvey F. Wachsman

[1] The Health Sciences Centers at Buffalo and Stony Brook are operated under the administration of their respective University Centers.

[2] This is an upper-division institution authorized to offer baccalaureate and master's degree programs.

# Administration and Faculty

## Broome Community College

### Sponsored by the County of Broome

Jeffrey Kraham, County Executive

### College Board of Trustees

GEORGE AKEL, President,
Akel Wholesale

ALEX DePERSIS, President
The Broome Chamber

SHARON DYER, Attorney
Levene, Gouldin & Thompson

CONSTANCE ENO, Teacher
Vestal Central School District

JOYCE MAJEWSKI, Vice President
HSBC Bank

ANTHONY MINCOLLA, III, President,
Mincolla Distributing

ROBERT J. MOPPERT, Regional Director,
NYS Dept. of Economic Development

MARC NEWMAN, President
Newman Development Group

NICHOLAS G. SERAFINI, JR., Chairperson
President, Serafini Nissan-Volvo

STUDENT TRUSTEE

### President

DONALD A. DELLOW
A.A., Paul Smith College • B.A., SUNY at Oswego
M.Ed., Ed.D., University of Florida

### VICE PRESIDENTS

KEITH COTRONEO, Vice President for Academic Affairs
B.S., Auburn University • M.Ed., Ed.S., Ed.D., University of Georgia

CHARLES J. QUAGLIATA, Vice President for Student and Community Affairs
Chancellor's Award for Excellence in Professional Service • Professor in English • B.S., LeMoyne College • M.A., Syracuse University

VICE PRESIDENT for Administrative and Financial Affairs – Vacant at printing

GRANT NEWTON, Associate Vice President for Information Resources
Chancellor's Award for Excellence in Professional Service • A.A.S., Broome Community College • B.S., M.A., Binghamton University

### DEANS

Dean of Academic Services–
vacant at printing

Dean of Liberal Arts and Human Services–
vacant at printing

VICTOR D. LOPEZ, J.D., ESQ., Dean of Business
B.A., Queens College, CUNY • J.D., St. John's University, School of Law

JULIA E. PEACOCK, Dean, Applied Sciences
Chancellor's Award for Excellence in Professional Service • B.S., Michigan State University • M.S., SUNY Health Science Center at Syracuse

### STAFF ASSOCIATES AND STAFF ASSISTANTS

IRENE J. BYRNES, Staff Associate, Assistant to the Dean of Liberal Arts and Human Services
Chancellor's Award for Excellence in Professional Service • B.A., M.A., Binghamton University

JEFFREY A. JURIK, Staff Associate to the Vice President for Academic Affairs
B.S., Northeastern University • M.B.A., University of Massachusetts

LINDA L. MAPES, Staff Associate, Assistant to the Dean of Applied Sciences
Chancellor's Award for Excellence in Professional Service • A.A., Broome Community College • B.S., M.A., Binghamton University

JESSE WELLS, Staff Assistant to the Vice President for Student and Community Affairs
B.A., Mansfield University

JENNIFER WOLTJEN, Staff Associate to the Dean of Business
B.S., Elmira College

# Academic Departments

Full time teaching faculty and credentials are listed alphabetically according to the following academic departments. Adjunct faculty (correct as of printing date of this catalog) are shown after full time listings. All college emeritus faculty are listed at the end of this directory.

**Arts, Language & Communications**
**Biology**
**Business**
**Business Information Technology**
**Chemistry**
**Civil Engineering Technology**
**Computer Studies**
**Criminal Justice**
**Dental Hygiene**
**Dietary Manager**
**Electrical Engineering Technology**
**Emergency Medical Technology**
**Engineering Science & Physics**
**English**
**Fire Protection Technology**
**Health Information Technology**
**History, Philosophy, & Social Sciences**
**Mathematics**
**Mechanical Engineering Technology**
**Medical Assistant**
**Medical Technology**
**Nursing**
**Physical Education**
**Physical Therapist Assistant**
**Psychology & Human Services**
**Radiologic Technology**
**Teacher Education/Early Childhood**

## Arts, Language, & Communications

FRANCIA ESPINOSA, Chairperson, Prof.
B.A., M.A.T., Binghamton University

KATHERINE BACON, Coordinator, Theater Program, Asst. Prof.
B.A., M.A., University of Maryland

JOHN BUTCHKO, Coordinator, Communication and Media Arts, Assoc. Prof.
A.A.S., Broome Community College • B.S., M.S., SUNY at Oswego

ANNE BOYER COTTEN, Assoc. Prof.
B.S., Drexel University • M.A., Cornell University

PATRICIA EVANS, Coordinator, Art & Design Program
B.S., M.A., Cornell University

HALL GROAT, II, Asst. Prof.
B.A., Binghamton University • M.F.A., Brooklyn College

MICHAEL KINNEY, Prof.
Chancellor's Award for Excellence in Teaching • B.A., Glassboro State College • M.M., Binghamton University • Ed.D., Syracuse University

LEIRA A. MANSO, Asst. Prof.
B.A., University of Puerto Rico • M.A., New York University • Ph.D., Binghamton University

MONIQUE SIMON, Asst. Prof.
B.A., M.A., Hunter College

**Adjuncts**

Maria Alonso, A.A.S., B.A., M.A., M.A.
Dana Anderson, M.A., Ph.D.
Ibrahim Benoh, M.F.A., Ph.D.
Karrie Bowen, A.S., B.A., M.A.
Anthony Brunelli, B.F.A.
Wayne Claypatch, B.F.A., M.A.
Christopher Coyne, B.A.
Gerald Grahame, M.A.
Alexandra Heder, B.A., M.A.
Laura Jacket, B.A., M.S.
Christopher Keeler, A.A.'s, B.S., B.A., M.F.A.
Laura Kennedy, M.M.
George Litynski, A.A., I.T., A.A.S
Andrew Martino, A.A., B.S., M.S.
Margit Mayberry, B.A., M.A.
Daniel Mosner
James Purtell, A.A.A., B.B.A., M.S.Ed.
Jan Quackenbush, B.A.
Anca Retezatu, B.A.
Bill Rogers, M.S., Ph.D.
Timothy Rolls, D.M.A.
Nancy Ryan, B.S.
Helen Sacco, B.A., M.S.Ed.
Virginia Shirley, M.A., Ph.D.
Laura Savidge, A.S., B.A., M.A.A.S., M.F.A.
Carole Stanley, A.A.S., B.S.
Paul Sweeny, M.A.
Barbara Ullmann, B.S., M.A., M.A., Ph.D.
Christopher Webber, M.M.
Maryann White, B.A., M.A.
Mark Williamson, M.A., Ph.D.

## Biology

RICHARD FIRENZE, Chairperson, Professor
Chancellor's Award for Excellence in Teaching
B.S., Cornell University • M.S., Elmira College • Ed.D., Binghamton University

MARK DEMETROS, Asst. Prof
B.S., Binghamton University • M.A.T., SUNY Cortland

ELLIOT REITZ, Prof.
Chancellor's Award for Excellence in Teaching
B.S., Clarion State College • M.S., Ohio University

DONALD B. WAGER, Prof.
B.A., Harpur College • M.A., Ph.D., Binghamton University

**Adjuncts**

Clinton Krager, M.S.
Diane T. Kelly, M.A.T.
Tony Longo, M.A.
Brian McKeon, M.S.
Judy Hall Modafferi, Ph.D.
Jennifer Musa, Ph.D.
Sandra Whittaker, A.A., A.A.S.

## Business

JANICE PITERA, C.M.A., Chairperson, Assoc. Prof.
B.S., Penn State University • M.B.A. Binghamton University

RICHARD BEHR, Professor
A.S., Broome Community College • B.S., M.B.A., Binghamton University

ANNE BLAKESLEE, Prof.
Chancellor's Award for Excellence in Teaching
A.A., Broome Community College • B.S., M.A.S., M.Ed., Johns Hopkins University

JOHN J. BUNNELL, Professor
Chancellor's Award for Excellence in Teaching
A.A.S., Alfred Agricultural and Technical College • B.B.A., Drake College of Florida • M.B.A., University of Scranton

JAMES C. CAVERLY, Assoc. Prof.
A.A.S., Broome Community College • B.A., M.S., SUNY at Albany

DOMINIC S. DEPERSIS, ESQ., Asst. Prof.
A.S., Broome Community College • B.S., Binghamton University • J.D., Syracuse University • Cert. Global Law & Practice, Syracuse University

CHARLES HESS, Assoc. Prof.
B.S., M.Ed., Bloomsburg State College

THOMAS KANICK, SPHR, Professor
A.A.S., Broome Community College • B.S., B.A., Bryant College • M.S., Binghamton University

MICHAEL J. KURYLA, Professor
B.A., M.A., Binghamton University

GERALD A. LOY, Esq., Professor
A.A.S. SUNY Delhi • B.S., M.S., University at Albany • J.D. Syracuse University

PATRICK F. O'BRYAN, Asst. Prof.
A.A.S., Broome Community College • B.S., M.S., Binghamton University

MID SEMPLE, Professor
M.A.S.S., Ph.D., Binghamton University

NATHAN WALZ, Tech. Asst. II
A.A.S., Broome Community College

GLEN WOOD, Professor
Chancellor's Award for Excellence in Teaching
A.A., Broome Community College • B.A., M.S., Elmira College

REY C. WOJDAT, Professor
A.S., Broome Community College • A.A.S., Sullivan County Community College • B.S., Rochester Institute of Technology • M.B.A., University of New Haven

**Adjuncts**

Jeff Abbey
David Cahill
Keith Cleary
Thomas DeCelle
Suzanne DiLella
Jeffrey Eades
Robert Fitzgerald
Tony Frontera
Sandra Garufy, Esq.
Richard Grace, Esq.
Daniel Halliday
Tina Hasemann
William Hodel
Mary Hughs

Sal Julian
Eileen Kane, Esq.
Martin Kane, Esq.
Dawn Kutz
Jeff Lake
Thomas Lamphere
James Lavo
Ed Lipski
Brian Loy, Esq.
Ann Prislupsky
Regina Ramsey
Timothy Reardon
Dorothy Rodney
Joseph Romani
Anne Marie Smith
Arthur Smith
Dennis Walker
Matthew Wolson
Ed Yetsko

## Business Information Technology

MARIE DAVENPORT, Chairperson, Prof.
A.A.S., Broome Community College • B.S., M.S., SUNY Albany • Ed.D., Nova Southeastern University

JOAN BANDURCHIN, Assoc. Prof.
A.A.S., Broome Community College • B.S., Kent State University • M.S., SUNY College of Technology

PATRICIA C. FRANKS, Professor
B.S., Bloomsburg University • M.A.S.S., Binghamton University

AGATINA VALLONE, Assoc. Prof.
A.A.S., Broome Community College • B.S., M.S., SUNY Albany

**Adjuncts**

William Gifford
Eric Hards
Theresa Komor
Nancy Lehman
Eric Saar

## Chemistry

HAROLD H. TRIMM, Chairperson, Prof.
B.S., M.S., Ph.D., Clarkson University

MICHAEL J. COSTELLO, Prof.
Chancellor's Award for Excellence in Teaching
B.S., University of Scranton • Ph.D., Binghamton University

JAMES L. FISH, Assoc. Prof.
A.A.S., Fulton-Montgomery Community College • B.S., Syracuse University • M.A., Binghamton University

WILLIAM METZAR, Prof.
A.A.S., Broome Community College • B.S., M.S., SUNY College of Environmental Science and Forestry

JOHN W. MICHA, Tech. Asst. II
A.A.S., Broome Community College

CATHERINE M. RYAN, Tech. Asst. II
A.A., Broome Community College • B.A., Binghamton University

MICHAEL J. WOVKULICH, Assoc. Prof.
B.S., SUNY Cortland • M.A., Ph.D., SUNY Buffalo

**Adjuncts**

Elaine Alfonsetti
Barbara Trimm

## Civil Engineering Technology

KELLI H. LIGEIKIS, Chairperson, Assoc. Prof.
B.S., Clarkson University • M.A., Binghamton University • Professional Engineer

ARTHUR L. HAAS, Prof.
B.S., University of Rhode Island • M.S., University of Illinois • Professional Engineer

GORDON SHERET, Assoc. Prof.
A.A.S., SUNY at Delhi • B.S., B.A., SUNY Buffalo • M.A., Binghamton University • Professional Engineer and Professional Land Surveyor

## Computer Studies

CHRIS PAPPAS, Chairperson, Prof.
B.A., SUNY at Oneonta • M.S., Binghamton University

JAMES L. ANTONAKOS, Prof.
A.A.S., Broome Community College • B.S.E.E., Rochester Institute of Technology • M.S., Binghamton University

PAULETTE GANNETT, Assoc. Prof.
B.S., M.S., Binghamton University

RACHEL HINTON, Asst. Prof.
B.S., M.S., Binghamton University

GARY KOHUT, Tech. Asst. II
A.S., Broome Community College • B.S., Binghamton University

KENNETH MANSFIELD, Asst. Prof.
A.A.S., Broome Community College • B.S., M.S., Binghamton University

BETH MOLLEN, Assoc. Prof.
B.A., SUNY Cortland • M.B.A., University of Scranton

WILLIAM MURRAY, Prof.
B.S., M.S., Ed.D., Temple University

JENNIFER SEDELMEYER, Asst. Prof.
A.A.S., Broome Community College • B.S., M.S., Binghamton University

SANDRA WRIGHT, Asst. Prof.
B.A., University of Tennessee • M.B.A., Binghamton University

**Adjuncts**

Margaret Bryden
Alan C. Dixon
Sondra Foreman
Shannon Smith

## Criminal Justice

GREGORY TALLEY, Chairperson, Assoc. Prof.
Chancellor's Award for Excellence in Teaching
B.A., College of Sante Fe • M.S., University of Alabama

SUSAN ELLIOT-KORSGREN, Asst. Prof.
B.A., Boise State University • M.S., Witchita State University

KATHLEEN McKENNA, Assoc. Prof.
B.A., LeMoyne College • M.S., J.D., Georgetown University

**Adjuncts**

William Brown, B.A., J.D.
Daniel Chambers, B.S.
Donald Chier, A.A.S., B.S.
Louis Crosetto, B.A.
Kenneth Crump, B.S., B.S.
Joseph Julian, B.A., M.A.
Robert Kent, B.A., M.P.A.
Robert O'Leary, B.A., J.D.
Matthew Rossi, A.A., B.S.
James Shoemaker, B.S., J.D.

## Dental Hygiene

MAUREEN MULLINS HANKIN, R.D.H., Chairperson, Prof.
B.S., University of Detroit • M.P.H., University of Michigan

PAULA J. FITCH, R.D.H., Assoc. Prof.
A.A.S., Broome Community College • B.S., M.S.Ed., Binghamton University

SUZANNE M. MAIER, R.D.H., Professor
A.A.S., Broome Community College • B.S., Boston University • M.S., Binghamton University

ELAINE V. DRELICH, D.D.S., Supervising Dentist

**Adjuncts**

Karen Barrie
Patricia Bradley, R.D.H.
Kathleen Case, R.D.H.
Marlaina Cody, R.D.H.
Craig Colas, D.D.S.
Meghan McGuinness, R.D.H.
Carole Stanley, R.D.H.
Anne Uncapher, R.D.H.
Dorothy J. Walsh, R.D.H.

## Dietary Manager

REY C. WOJDAT, Coordinator, Prof.
A.S., Broome Community College • A.A.S., Sullivan County Community College • B.S., Rochester Institute of Technology • M.B.A., University of New Haven

## Electrical Engineering Technology

WILLIAM MURRAY, Chairperson, Prof.
B.S., M.S., Ed.D., Temple University

CHRISTOPHER J. CONANT, Assoc. Prof.
A.A.S., Broome Community College • B.T., M.S., Binghamton University

BRUCE F. DeVOE, Prof.
B.S., M.S., SUNY Buffalo

GARY C. DiGIACOMO, Asst. Prof.
A.A.S., Broome Community College • B.T., M.S., Binghamton University

DONOVAN E. McCARTY, Tech. Asst. II
A.A.S., Broome Community College

BINA PARAMASIVAIAH, Assoc. Prof.
B.S.E.E., Bangalore University, India • M.S.E.E., University of Connecticut

**Adjuncts**

Michael Coppola

Alan C. Dixon

Daniel J. Youngs

## Emergency Medical Technology – Southern Tier Paramedic Program

DAVID TAGGART, MHA, NREMPT-P, Program Administrator
B.A., SUNY Buffalo • M.H.A., Washington University, St. Louis, MO • Paramedic Certification, Erie Community College

MICHAEL SCHRECK, MD, Medical Director
Centro De Estudios University, Mexico • Intern/Residency, Southside Hospital, Bayshore, NY

J. DAVID TINKLEPAUGH, EMT-P, Clinical Coordinator

**Clinical Affiliate Faculty – Paramedic**

Daniel Babcock
Robert Bealo
Mike Bender
Michael Boles
Steve Brown
Jeffrey Crutcher
Susan Cummings
Tim Dahulich
Elizabeth Darrow
Bryan Davidson
Marty Delaney
Horton Fox
Stacey Grubham
Heath Hauptfleish
Michael Igo, Jr.
Jennifer Jacobs
Gary Kiehle
Thomas Lamont
Michael McClenon
Steve McGargle
Joe Mohr
Robert Parke, Jr.
Ron Plocek
Mark Rauscher
Glenn Roberts
Ray Serowik
James K. Smith
Mark Tomko
Dean VanHart
Rick Woerter

## Engineering Science and Physics

THOMAS B. GRACE, Chairperson, Assoc. Prof.
B.S., M.S., Clarkson University

GEORGE EGER, Tech. Asst. II
A.A.S., Broome Community College

ROBERT K. FORSYTHE, JR., Prof.
B.S., Ursinus College • M.S., Clarkson University • Ph.D., Kent State

JOHN W. GERTY, Prof.
B.A., SUNY Buffalo • M.S., University of Iowa

MICHAEL GLASGOW, Assoc. Prof.
B.S., Memphis State University • B.A., University of Tennessee • M.S., Binghamton University

KAREN GOODMAN, Prof.
Chancellor's Award for Excellence in Teaching • B.S., SUNY Albany • M.S., Cornell University

ROBERT LOFTHOUSE, Assoc. Prof.
A.S., Alfred State College • B.S., Clarkson University • M.S., Binghamton University

RALPH McGREW, Assoc. Prof.
B.S., Pennsylvania State University • M.S., Cornell University

BRUCE OLDFIELD, Prof.
Chancellor's Award for Excellence in Teaching • B.S., SUNY Cortland • M.A., Binghamton University

PETER RUGGIERI, Prof.
B.S., Cooper Union • M.S., University of Pennsylvania

**Adjuncts**

Marilyn Akins
Clare Gibbs
Sally Giuffrida
Kennie Lass
Rigoberto Maximo
John McCallen
Tom Quigley
Jim Rienhardt
Jay Sarton
Barbara Trimm

## English

MARY E. DICKSON, Chairperson, Prof.
B.A., St. Lawrence University; M.A., SUNY Oswego

DIANE M. ALLEN, Asst. Prof.
B.A., SUNY Geneseo; M.A., Binghamton University

MARGARET L. DEYS, Prof.
B.S., M.S., SUNY Cortland

DONALD DUNHAM, Asst. Prof.
B.A., M.A., Binghamton University

MICHAEL GEE, Asst. Prof.
A.A., Broome Community College; B.A., M.A., Binghamton University

JAMES A. GORMLEY, Assoc. Prof.
A.A., Newton Junior College; M.A., Binghamton University

ANDREW J. HAGGERTY, Asst. Prof.
B.A., SUNY Stony Brook; M.A., Ph.D., University of Miami

ANNA C. HALLIGAN, Asst. Prof.
B.A., Mercy College; M.A.T., Manhattanville College

MARGARET LOGALBO, Asst. Prof.
B.A., Utica College of Syracuse University; M.S., SUNY Cortland

JAMES B. NOVAK, Prof.
B.A., M.A., Binghamton University; Ph.D., Syracuse University

CHRISTOPHER ORIGER, Assoc. Prof.
B.A., SUNY Buffalo; M.A., Ph.D., Binghamton University

BARBARA SANDERSON, Asst. Prof.
B.A., M.A., Binghamton University

GREGORY SARACENO, Prof.
B.A., Ithaca College; M.A., Ph.D., Binghamton University

SUZANNE SHEPARD, Assoc. Prof.
B.A., Eisenhower College; M.A., Ph.D., Binghamton University

RICHARD R. STONER, Assoc. Prof.
B.A., LeMoyne College; M.A., Colgate University

SUSAN Y. WILLIAMS, Writing Center Coordinator
A.A., Broome Community College; B.A., M.A., Binghamton University

**Adjuncts**

Kim Allen-Gleed, B.A., M.A.,
Kristen Bense-Hause, A.A., B.A.
Karrie Bowen, A.S., B.A., M.A.
David Chirico, B.A., M.A., Ph.D.
Chad Davidson, B.A., M.A.
Mary Donnelly, B.A., M.A., Ph.D.
Christiana Howe, A.S., A.S., B.A., M.A.T.
Steve Latzo, B.A., M.A.
Kathy Lattimore, B.A., M.A.
Helaine Lubar, B.A., M.A.
Nilsa Mariano, A.S., B.A., M.A.
Andrew Martino, A.S., B.A., Ph.D.
Fridolin Mellert, B.A., M.A.
Carolyn Morgan-Appelt, B.A., M.S.
Alicia O'Neill, B.S.
David Pitcher, B.A., M.S.Ed.
Craig Russell, B.A., M.A.
Ruth Schnabl, M.A.
Mary Seel, B.A., M.A.
Katrina Shilts, B.A., M.A.
Carol Silverberg, B.A., M.A.
Joe Wolfer, B.A., M.A.T.

## Fire Protection Technology

STEPHEN ANDREW, Coordinator
RICHARD GILBERT
MICHAEL HEIDE
STEPHEN HRUSTISCH
THOMAS VROMAN

## Health Information Technology

MARY ROSATO, Chairperson, Assoc. Prof.
B.S., University of Detroit-Mercy • M.A., Binghamton University, R.H.I.A.

JANE A. HLOPKO, Assoc. Prof.
A.A.S., Broome Community College • B.S., M.A., Binghamton University, R.H.I.A.

### Adjuncts

Mary Jo Bowie, R.H.I.A.
Lori Liskovec, R.H.I.T.
Lorraine Wenig, R.H.I.A.

### Clinical Affiliate Faculty

Cathy Atwell
Sheri Beckwith, R.H.I.T.
Teri Bennet
Susan Bogart, R.H.I.T.
Rose Catanese, R.H.I.T.
Jean Collins
Pamela Corbin, R.H.I.T.
Patti Debetta, R.H.I.T.
Joanne Demarest, R.H.I.T.
Penny Farley, R.H.I.T.
Nancy Fuller, R.H.I.A.
Alicia Hurban
Margaret Latta, R.H.I.T.
Rose Murphy, R.H.I.T.
Denise Perry, R.H.I.A.
Susan Pixley, R.H.I.A.
Cathy Rosso, R.H.I.A.
Regina Schaffer, R.H.I.T.
Debra Smith, R.H.I.T.
Janet Strauss-Moat, R.H.I.T.
Sandra Thompsohn, R.H.I.A.
Phyllis Tittle
Lorraine Wenig, R.H.I.A.

## History, Philosophy, and Social Sciences

DOUGLAS GARNAR, Chairperson, Prof.
B.A., M.A., SUNY Albany

LORENZ FIRSCHING, Assoc. Prof.
A.A., Broome Community College • B.A., M.A., Ph.D., Binghamton University

GEORGE HIGGINBOTTOM, Asst. Prof.
B.A., Harvard College • M.A., San Francisco State University • Ph.D., Cornell University

BENTZIL M. KASPER, Professor
Chancellor's Award for Excellence in Teaching
B.A., Boston University • M.A.T., Antioch University • M.Ph., Syracuse University • M.B.A., Binghamton University

HAROLD KOSTER, Asst. Prof.
B.A., Adelphi University • Ph.D., University of Pennsylvania

KATHLEEN M. McKENNA, Assoc. Prof.
B.A., LeMoyne College • J.D./M.S. F.S., Georgetown University

ELIZABETH PATCH, Asst. Prof.
B.S., M.S., Ph.D., Lehigh University

RICHARD M. ROMANO, Prof.
B.A., St. Lawrence University • M.A., Ph.D., Binghamton University

GORDON THOMASSON, Asst. Prof.
B.A., UCLA • M.A., University California, Santa Barbara • Ph.D., Cornell University

LEELAND WHITTED, Asst. Prof.
B.A., Empire State College, SUNY • M.S., SUNY Cortland

GRETA WINGATE, Prof.
Chancellor's Award for Excellence in Librarianship • B.A., Boston University • M.A., Binghamton University • MLS, SUNY Albany

### Adjuncts

Phyllis Amenda, M.A.
Richard Bucci, M.A.
Irene Byrnes, M.A.
Steven Call, Ph.D.
William Case, M.A.
Paul Chambers, M.A.
Frank DiStefano, M.A.
Linda Mapes, M.A.
John McGuire, Ph.D.
Carla Michalak, M.A.
Donna M. Rehak, M.S.

## Individual Studies

DOUGLAS GARNAR, Coordinator, Prof.
B.A., M.A., SUNY Albany

## Mathematics

MARY WOESTMAN, Chairperson, Prof.
B.A., Rosemont College • M.A., Temple University

MARVIN BLACHMAN, Asst. Prof.
B.B.A., CUNY • M.S., M.B.A., Ph.D., Carnegie Mellon University

TIMMY BREMER, Assoc. Prof.
B.S., M.A., SUNY Buffalo

TUESDAY JOHNSON, Asst. Prof.
B.S., Lewis-Clark State College • M.S., New Mexico State University

ELIZABETH KLIPSCH, Prof.
B.S., M.S., University of Illinois

JEAN M. KRICHBAUM, Prof.
B.S., LeMoyne College • M.A., M.A.T., Binghamton University

MARIA LANDER, Prof.
B.S., M.S., Catholic University of Peru • M.S., Binghamton University

DAVID MICHALAK, Learning Specialist
A.S., Broome Community College • B.S.M.E., Rochester Institute of Technology • M.A.T., Binghamton University

LUIS MORENO, Prof.
B.S., Rensselaer Polytechnic Institute • M.S., SUNY Albany

PAUL O'HERON, Prof.
A.A., A.A.S., Monroe Community College • B.S., SUNY Fredonia • M.S., Michigan State University

RICHARD L. REMIZOWSKI, Assoc. Prof.
A.A.S., Mohawk Valley Community College • B.A., SUNY Oswego • M.A., SUNY Buffalo

GREGORY SLIWA, Prof.
B.S., Niagara University • M.A., University of Missouri-Columbia

MARY WOLYNIAK, Asst. Prof.
A.B., M.S., Marywood University

ROBERT WOODS, Prof.
B.S., St. Bonaventure University • M.S., Elmira College

### Adjuncts

Elaine Alfonsetti
Michael Alunni
Norma Bachler
Thomas Boyuka
Jane Colapietro
Roy Dando
Anthony Gale
Richard Goodrich
Melissa Korducavich
Douglas Leigh
Patricia Livermore
Daniel Palmer
Martha Pitcher
Carol Reynolds
Elizabeth Snyder
Andrea Sollitto
Gerald Swartout
Duane Titus
Nancy Trudgen
John Turna
Hakan Ugur
Melanie Ann Williams
Denise Yull

## Mechanical Engineering Technology

JOHN PETREWSKI, Chairperson, Prof.
B.S., M.S., Wilkes College • M.S.A.S., Binghamton University College of Technology • M.S., SUNY Oswego

DIRK J. ELLIOTT, Assoc. Prof.
A.S., Broome Community College • B.S.M.E., Clarkson University • M.A.T., SUNY Cortland

WILLIAM G. KELLY, Assoc. Prof.
A.A.S., Johnson Institute of Technology • B.S., SUNY

FRANCIS P. PLUNKETT, Asst. Prof.
B.S., Spring Garden College • M.S., Rochester Institute of Technology • Professional Engineer

ANDREW J. SOLAK, Tech. Asst. II
A.A.S., Broome Community College • B.S., Rochester Institute of Technology

## Medical Assistant

ANDREA WADE, Chairperson, Assoc. Prof.
B.S., The Catholic University of America • M.S., Ph.D., University of Notre Dame • MT (ASCP)

CATHERINE E. SCHULDT, CMA, RN, EMT, Asst. Prof.
A.A.S., Broome Community College • B.S., Binghamton University

### Adjuncts

Jerome A. Morrison, R.N., NREMT-P, A.A.S.

### Clinical Affiliate Faculty

Rachele Caroll
Michelle Eastman
Mary Ellen Francescone
Kathy Frost, C.M.A.
Barbara Gardner
Betty Gardner
Bea Grace, R.N.
Nancy Greene
Mary Izenberg
Dusty Kinney
Sandy Magnus
Judy Martin
Tracy Morgan
Joanne Offnick
Betty Paro
Ann Puilano
Wendy Rifenberg
Robin Ryan
Barbara Spring
Carol Wolfe
Lori Wurth

## Medical Technology

ANDREA WADE, Chairperson, Assoc. Prof.
B.S., The Catholic University of America • M.S., Ph.D., University of Notre Dame • MT (ASCP)

HARRY WANDELL, Asst. Prof.
B.S., Mansfield University • M.Ed., Elmira College • MT (ASCP)

### Adjuncts

Angela Armato, B.S., MT (ASCP), CLS (NCA)
Joann Dawson, MBA, MT (ASCP)
MaryAnn Owazany, B.S., MT (ASCP)
Maryann Wagner, M.S., MT (ASCP)

### Clinical Affiliate Faculty

Elizabeth Andrien, B.A., M.T.
Miriam Astacio, B.A., M.T., S.C. (ASCP)
Melissa Bevins, M.T. (ASCP)
Jeannine Bonhoff, M.T. (ASCP)
Sandra Bordwell, M.L.T.
Rebecca Brooks-White, B.S.
Barbara Brownrigg, M.S., M.T., (ASCP) SH
Cheryl Burtch, M.T. (ASCP) SM
Kelly Cwikla, M.T., SM (ASCP)
James Danko, B.S.
Elizabeth Dayton, M.T. (ASCP)
Elaine Drake, MPS, M.T. (ASCP)
Ann Marie Fauver, M.T. (ASCP)
Pat Guinane, B.A., M.T. (ASCP)
John Haig, M.T. (ASCP)
Linda Hendricks, M.T. (ASCP)
Elaine Johnson, B.S., M.T. (ASCP)
E. Robert Keefner, B.S., M.T. (ASCP)
Marc Ketchum, B.S., M.T. (ASCP)
Carl Klevinski, M.S., M.T. (ASCP)
Johneen Loftus, M.T. (AMT)
Diane Madison, M.T., S.M. (ASCP)
Craig Mannix, B.S.
Valeria Matson, B.S.
Loretta Maxon, M.L.T., P.B.T. (ASCP)
Ronald May, M.T. (ASCP)
Marian McCormick, M.L.T.
Karen Meade, M.T. (ASCP)
Marcy Miles, M.T. (ASCP)
Cecilia Miller, M.S., M.T. (ASCP) SBB
Matt Mitchell, M.L.T. (ASCP)
Beth Morrill, M.T. (ASCP)
Beth Murwin, BB, M.L.T. (ASCP)
George Nevin, M.T. (ASCP)
Polly Parsons, B.S., M.T. (ASCP)
David Patterson, M.T.
Diane Perry, M.T. (ASCP)
Janet Perry, B.S., M.T. (ASCP)
Linda Putnam, C.P.T. (ASPT)
Robin Puzo, B.S., M.T. (ASCP)
Lina Ramli, M.T. (ASCP)
Linda Redmond, M.S., M.T. (ASCP)
Kathy Riess, M.T. (ASCP)
Merelyn Rogers, M.T.
Jennifer Rowe, M.L.T. (ASCP)
Lucy Sanders, M.T., H., BB (ASCP)
Betsy Sentigar, M.T. (ASCP) SM
William Shang, M.D.
Billie Sheppard, M.S., M.T. (ASCP)
Georgiana Suleski, M.T. (ASCP)
Donna Taborne, M.T. (ASCP)
Lisa Temple, B.S., M (ASCP)
Evelyn Thomas, B.S.
Robert Tuggey, Ph.D.
Walter Turns, M.L.T.
Nancy Versteeg, C.L.A. (ASCP)
Lyla Vining-Wolford, M.T., S.C. (ASCP)
David Wadsworth, M.T. (ASCP)
John Walters, B.S.
Martha Weckle, M.T. (ASCP)
Mary Lou Whitaker, B.A., M.T. (HEW)
Timothy Williammee, B.S., M.T. (ASCP)
Sandra Wilson, M.T. (ASCP)
Barry Winters, B.S.M.T., M.S.M.T., M.T. (ASCP), M.A. (HCM)
Loren Wolsh, M.D.
Connie Yerson, B.S., M.T. (AMT)
Rebecca Young, M.T. (ASCP)

## Nursing

CLAIRE LIGEIKIS-CLAYTON, Chairperson, Prof.
B.S., M.S., Ed.D., Binghamton University

BARBARA BALACI, Asst. Prof.
B.S.N., M.S., Binghamton University

JANET DENMAN, Asst. Prof.
B.S.N., Alfred University • M.S., Binghamton University

ELAINE HOWARD, Asst. Prof.
B.S.N., Medgar Evers College • M.S., Syracuse University

PATRICIA NEWLAND, Prof.
B.S., SUNY Utica/Rome • M.S., Syracuse University

JUDITH SAMSEL, Assoc. Prof.
B.S., Wilkes College • M.S.N., Villanova University

CINDY STEVENS, Asst. Prof.
B.S.N., Keuka College • M.S., Kings College

CARL AKINS, Tech. Asst. II, The Decker Center
A.A.S., Broome Community College

### Adjuncts

Patricia Callahan
Michelle Codner
Barbara Fortunato-Hastings
Wendy Heckman
Linda Jowett
Judy Kominos-Reitz
Mary More
Rose Potter
Mary Rose
Faye Utyro

## Physical Education

DUANE WHITTAKER, Chairperson, Asst. Prof.
B.S., SUNY Cortland

### Adjuncts

Sandra Alter-Ballard, B.S., M.S.
Helen Battisti, B.S., M.S.
Thomas Carter, B.S., M.S.
Nancy Kendrot, B.S., M.S.

## Physical Therapist Assistant

DENISE ABRAMS, PT, Chairperson, Prof.
B.S., Russell Sage College • M.A.S.S., Binghamton University

JULIANNE MARTIN, PT, ACCE, Asst. Prof.
B.S., SUNY Buffalo • M.A.S.S., Binghamton University

### Adjuncts

Deb Knapp, PTA
Lynnette Maslin, PTA
Renee Santelli, PT
Michele Williams, PT

### Clinical Affiliate Faculty

Carol Allen, PT
Charles Anderson, PT
Kimi Archer, PT
Sheila Armstrong, PT
Paul M. Belonga, PT
Louis Boisvert, PT
Robbie Centorani, PT

Penny Chase, PT
Sarah Congdon, PTA
Melanie Coombs, PT
Laura Crummey, PT
Joann Currie, PT
Pat Foley, PT
Kelly Ford, PT
Bobbi Furnas, PT
Cheryl Gaetano, PT
Martha Gerty, PT
Jeanne Marie Haskell, PT
Byran Hathaway, PT
Tracy Henry, PT
Steve Hill, PT
Chris Hoke, PT
Karen Holmes, PT
Terri Hoppenrath, PT
Keith Kurtz, PT
Allison Latz, PT
Peter Lechowski, PT
Todd Mansfield, PT
Mark Mashevitz, PT
Lisa Miller, PT
Michael Niedzielski, PT
Ginny Nolan, PT
Christine Osgood, PT
Sandi Preston, PT
Brian Shive, PT
Carrie Shore, PT
Judy Terwilliger, PTA
Ann Wagner, PT
Pat Ward, PT
Linda Watt, PT
Kathy Yagley, PT
Tony Zgardzinski, PT

## Psychology and Human Services

MARGHERITA ROSSI, Chairperson, Assoc. Prof.
Chancellor's Award for Excellence in Teaching • B.S., University of Pennsylvania • M.A., Fairleigh Dickinson University

FRANCIS L. BATTISTI, Prof.
Chancellor's Award for Excellence in Teaching • A.A.S., Broome Community College • B.S., M.S., SUNY Albany • M.S.W., Syracuse University

THOMAS L. CRANDELL, Prof.
B.A., Kings College • M.S., University of Scranton • Ph.D., Cornell University

KRISTIN ERICKSEN, Asst. Prof.
A.A., Broome Community College • B.A., Binghamton University • M.S.W., Syracuse University

JACQUELINE SHRADER, Assoc. Prof.
B.S.N., Niagara University • M.S.N., Syracuse University

### Adjuncts

William Bowie, M.S.
William Campoli, M.A.
James Crandall, M.Ed.
Corrine Crandell, M.S.
Kenneth Fay, M.B.A.
Gregory Harris, Ed.D.
Arthur Johnson, M.S.W.
Kimberly Kraebel, Ph.D.
John Lishok, M.A.
Jeffrey Miller, Ed.S.
Michael Muzzey, M.A.
Maribeth Palmer-King, M.S.
Gary Smith, Ed.D.
Frank Trczinski, M.A.
Lawrence Truillo, M.S.
Jeffrey VanSyckle, M.S.
Stan Wanglund, M.S.
Mary Whittaker, M.S.W.

## Radiologic Technology

NANCY BUTTON, Chairperson, Prof.
R.T., Nesbitt Memorial Hospital School of Radiologic Technology • B.A., Wilkes College • M.S., Marywood College

JANE DeMARIA, Asst. Prof.
A.A.S., Broome Community College • B.S., Medical College of Georgia • M.A., Binghamton University

BARBARA VALENTINO, Assoc. Prof.
A.A.S., Broome Community College • B.P.S., SUNY Empire State College • M.A., Binghamton University

### Clinical Affiliate Faculty

Kim Bradley, R.T.
Gale Brown, R.T.
Mark Carlson, R.T.
Davette Cummings, R.T.
Judy L. Decker, R.T.
Collen Donahue, R.T.
Mark Fendick, R.T.
Elaine Frisbee, R.T.
Pamela Hoffman, R.T.
Mary Holthouse, R.T.
Craig Kick, R.T.
Carol MacGeorge, R.T.
Eileen Miller, R.T.
Susan Miller, R.T.
Connie Monday, R.T.
Ken Munro, R.T.
Donna Sawyer, R.T.
Tammy Shaver, R.T.
Robert Stone, R.T.
Rayanne Tisdale, R.T.
Suzanne Wolf, R.T.
Frederick Zang, R.T.
Shawn Zynch, R.T.

## Teacher Education/Early Childhood

BARBARA NILSEN, Teacher Ed./Early Childhood Coordinator
A.A.S., Broome Community College • B.S., M.A.S.S., Binghamton University • Ed.D., Nova University

### Adjuncts

Sue Bennett, M.A.
Lenny Grozier, M.A.
Joan Koster, M.A.
Karen Lawrence, M.A.
Merry McNally, M.A.
Sharon Wells, Ed.D.

# College Offices/Programs

The following is an alphabetical listing of all the support offices or programs at the college and their professional staff.

## Admissions

ANTHONY S. FIORELLI, Director
A.A.S., Broome Community College • B.S., SUNY Albany • M.S., Binghamton University

MICHAEL CARRA, Asst. Director
B.A., Binghamton University

VALERIE CHIER, Staff Asst.
B.S., Binghamton University • M.Ed., Clemson University

MELISSA WELSH, Staff Asst.
B.A., Colgate University • M.Ed., University of Massachusetts-Amherst

### ACCESS Center– Counseling and Advising Services

## Advising

THERESA FADDEN, Academic Advisor
A.A., Broome Community College • B.S.W., M.S.W., Marywood College

HEATHER GUTMAN-GERSHKOVICH, Academic Advisor
B.S., M.A., Binghamton University

LAURA ST. GEORGE, Academic Advisor
A.S., Champlain College • B.S., Trinity College • M.S.A., C.A.M.S., St. Michael's College

## Counseling

NANCY LaBARE, Assistant Counselor
A.A.S., Pace University • B.S., M.B.A., Binghamton University • M.S.Ed., SUNY Oneonta

MARY A. McCARTHY, Full Counselor
A.A., Broome Community College • B.A., SUNY Cortland • M.S., Ed.S., SUNY Albany

JOHN PAGURA, Assoc. Counselor
B.A., M.A., SUNY Binghamton • M.S.W., Marywood College

JOE SPENCE, Associate Counselor
B.A., Alfred University • Ed.M., SUNY Buffalo

## Athletics

DANIEL J. MINCH, Director
B.S., SUNY Brockport • M.S., Elmira College

JON SMITH, ATC, Asst. Director
B.S., Ohio University

## Budget Office

REGINA L. LOSINGER, Budget Officer
Chancellor's Award for Excellence in Professional Service • A.S., Broome Community College • B.S., M.B.A., Binghamton University

## Campus Operations

RICHARD R. ARMSTRONG, Director of Campus Operations
A.S., Broome Community College • B.S., Clarkson University • Professional Engineer

STANLEY K. LING, Assistant to Director of Operations for Technical Services

BARRY PETERSON, Assistant to Director of Operations for Physical Plant

DANIEL MEYERS, Assistant to Director of Operations for Custodial Services

## Center for Community Education

DEBRA MORELLO, Director
B.A., M.B.A., Binghamton University

JANET HERTZOG, Asst. Director
A.S., Broome Community College • B.S., SUNY Buffalo

KAREN MADSEN, Staff Associate, Community Programs
B.A., M.S., Binghamton University

## Computing Resources

JOHN C. PETKASH, Director of Computing Resources
A.A.S., Broome Community College • B.S., SUNY Oswego • M.A., Binghamton University

SCOT BEEKMAN, Programmer Analyst I
A.S., Broome Community College

CYNTHIA CERRETANI, Programmer Analyst II
B.S., St. Bonaventure University

JOELLEN HARTMAN, Programmer Analyst I
A.A.S., Broome Community College

JEFFREY M. HATALA, Systems Analyst
A.A.S., Alfred Ag. & Tech. (Architecture) • A.A.S., Alfred Ag. & Tech. (Computer Graphics)

BARBARA HUGHES, Programmer Analyst II
B.A., SUNY Potsdam

MEIGO HUI-YING KAO, Programmer Analyst I
B.S., Binghamton University

GREGORY P. LOTEMPIO, Tech. Asst. IIA
A.A.S., Broome Community College

JAMES J. MUCCIO, Tech. Asst. IIA
A.A.S., Broome Community College

MATTHEW RYAN, Tech. Asst. IIA
A.A.S., Broome Community College • B.S., Binghamton University

J. LEE SKORKO, Programmer Analyst IIA
A.A., Corning Community College • A.A.S., (Chem.), A.A.S., (Ind. Tech., Computer Emph.), Broome Community College • B.A., SUNY Cortland • M.S., Binghamton University

## Educational Opportunity Program (EOP)

CLAUDIA CLARKE, Director
B.A., College of New Rochelle • M.A., Binghamton University

## Finance Office

ALAN L. KATZ, CPA, Controller
Chancellor's Award for Excellence in Professional Service • B.S., Binghamton University • M.B.A., University of Chicago Graduate School of Business

LYNNE BUCHER, Payroll Supervisor
A.A.S., Broome Community College

PATRICIA J. CLARK, Bursar
Chancellor's Award for Excellence for Professional Service • A.A.S., Broome Community College • B.S., SUNY Empire State College

JOAN DREW, Postal Operations

JOHN T. HASTIE, Purchasing Agent
B.S., University of Tennessee

JEANETTE O. TILLOTSON, Assistant Controller
B.S., Binghamton University

## Financial Aid

DOUGLAS S. LUKASIK, Director
B.A., Allegheny College • M.Ed., Temple University

JOSEPH M. DROTAR, Asst. Director
A.A.S., Broome Community College • B.S., Binghamton University

PATRICIA L. SHAW, Staff Assistant
A.A.S., Broome Community College

## Human Resources

ELIZABETH A. WOOD, Human Resources Officer
Chancellor's Award for Excellence in Professional Service • B.A., Wilkes College • M.A., Pennsylvania State University

SUSAN S. MAGUIRE, Human Resources Assistant
B.A., M.B.A., University of Massachusetts

## Information Resources

GRANT NEWTON, Associate Vice President for Information Resources
Chancellor's Award for Excellence in Professional Service • A.A.S., Broome Community College • B.S., M.A., Binghamton University

PATRICIA FRANKS, Professor, Coordinator Teaching Resource Center
B.S., Bloomsburg University; M.A.S.S., Binghamton University

GEORGE GUBA, Multimedia Instructional Designer
B.A., Binghamton University • M.S., Ithaca College

DAVID ISABELLA, Director of Networking/ Telecommunications
B.A., SUNY Geneseo

HOWARD STREBY, Network/Telecommunications Specialist
A.S., Broome Community College

## Institutional Research

TIMOTHY MILLARD, Director
B.S., M.A., Liberty University • Ed.D., University of Virginia

## International Education

ROMANO, RICHARD, Director, Prof.
B.A., St. Lawrence University • M.A., Ph.D., Binghamton University

ALBERTO MILLER, Director
Cooperative Association of States for Scholarships (CASS)
B.A., Universidad Nacional Mayor de San Marcos, Peru • M.A., Ph.D., Binghamton University

MARIA THERESA GONZALEZ, Staff Assistant for Contracted International Programs
B.S., Corporacion Tecnologica de Bolivar, Cartagena, Columbia • M.A., Binghamton University

ELLEN ROMANO, Study Abroad Advisor
B.A., St. Lawrence University

## Learning Assistance Center

DAVID MICHALAK, Chairperson
A.S., Broome Community College • B.S.M.E., Rochester Institute of Technology • M.A.T., Binghamton University

LISA HUGHES, Coordinator, Learning Disabilities Program
B.S., Ohio State • M.A., Mansfield University

STEVEN NATALE, Prof.
B.A., St. John Fisher College • M.A., SUNY Brockport • M.S.W., Marywood College

LORETA PANICCIA, Coordinator Peer Tutoring Program
B.S., M.A., Binghamton University

JOHN J. PIEROG, Prof.
B.S., M.Ed., Plymouth State College • Ed.D., Nova University

BRUCE E. POMEROY, Director, Student Support Services
A.A., Broome Community College • B.A., University of Iowa • M.A., Bradley University

KENNETH P. SEINO, Assistant Director, Student Support Services
B.ME., M.M., Michigan State University

SUSAN WILLIAMS, Writing Center Coordinator
A.A., Broome Community College • B.A., M.A., Binghamton University

JOSEPH CROTEAU, Coordinator of Deaf/Hard of Hearing Program, A.S., Broome Community College

## Adjuncts

Janet Gilligan

Kathy Ryder

Alice White

## Library
**(Cecil C. Tyrrell Learning Resources Center)**

ALICE McNEELY, Director, Prof.
Chancellor's Award for Excellence in Teaching • B.F.A., Syracuse University • M.S., Binghamton University

DANA CURTIN, Asst. Librarian
B.A., SUNY Oswego • M.L.S., SUNY Albany

BEVERLY B. LONG, Asst. Librarian
B.A., Ramapo College of New Jersey • M.F.A., Mason Gross School of the Arts, Rutgers University • M.L.S., Rutgers University

ROBIN PETRUS, Asst. Librarian
B.S., Perdue University • M.L.S., Ball State University

KAREN L. PITCHER, Asst. Librarian
B.S., M.L.S., SUNY Albany

JANE M. RAWOOF, Asst. Librarian
B.A., George Washington University • M.S.L.S., Catholic University

ANN REPASKY, Asst. Librarian
B.S.E.D., Youngstown University • M.E.L.S., Duquesne University

CAROL RIPIC, Asst. Librarian
B.A., SUNY Albany • M.S.L.S., Syracuse University

DEBORAH L. SPANFELNER, Librarian
Chancellor's Award for Excellence in Librarianship • B.A., Nazareth College • M.A., Binghamton University • M.L.S., Syracuse University

KONRAD BACH, Media Technician

DAVID LJUNGGREN, Media Technician

KURT NELSON, Tech. Asst. II
A.A.S., Broome Community College

## Placement Services

LAWRENCE TRUILLO, Director (Acting)
A.A., Broome Community College • B.A., SUNY Oneonta • M.S., University of Scranton

## Publications Center

GLENDA M. BLAKE, Director (Acting)
B.A., SUNY Oswego

MICHELLE PERRICONE, Tech. Assistant II
A.A., B.S., Empire State College

## Registrar's Office

WILBERT E. CORPREW, Registrar
B.A., Virginia Union University • M.A., Binghamton University

MARTIN GUZZI, Assistant Registrar
A.S., Broome Community College • B.S., M.B.A., Binghamton University

## STRIVE

**(Services and Training Resources for Individuals in Vocational Training)**

NADIA SALAZAR, Coordinator
A.A., Broome Community College • B.S., Binghamton University • M.S.W., Marywood College

## Sponsored Programs

CLIFFORD BALLIET, Director
B.S., Clarkson University • M.S., Syracuse University

**Perkins III Local Advising Council**

MOHAMMED ALI, Arabic Translator and Interpreter, Refugee Assistance Center

CAROL ARONOWITZ, Exec. Dir., Refugee Assistance Center

JANET BEAL, Vice President Tarco Steel, Inc.

MICHAEL DAVIS, Community Representative of BCC

JOHN FLYNN, JR., Regional Administrator, New York State Department of Labor

MICHAEL HAGGERTY, Senior Employment Coordinator

ANASTASIA KALECHITZ, RN, BSN, Community Health Nurse, Broome County CASA

RICHARD LINDHORST, Director, Broome County Office of Employment & Training, Southern Tier Regional Career Center

JOHN STERLACCI, United Way of Broome County

## Student Activities

DAVID R. MASLAR, Director
B.A., M.A.T., Binghamton University

## Student Health Services

MARY LIGOURI, N.P., Director
A.A.S., Nursing, Broome Community College • B.S.N.,M.A., Binghamton University

THOMAS COOK, M.D.

MICHAEL HAYES, D.O.

CAROL WOLF, R.N., Binghamton General

SHARON ZEMBECK, R.N., Charles S. Wilson Hospital Veterans' Services

# College Affiliate Organizations

## Faculty-Student Association of BCC, Inc.

GARY B. FINCH, Executive Director
A.A.S., Broome Community College • B.S., Binghamton University

DONNA M. FIRENZE, Director - College Bookstore
A.A.S., Broome Community College

NANCY SELIGA, Director - The B.C. Center (Child Care)
A.A.S., Maria Regina College

## BCC Foundation

JUDY U. SIGGINS, Executive Director
B.A., M.A., Ph.D., University of Chicago

## Greater Broome Tech Prep

Staff Assistant - vacant at printing

## EMERITUS COLLEGE STAFF

James W. Abbott, Jr.
Elizabeth Altenhofen
Richard E. Baldwin
Patricia BeGasse
William Beston
Joseph Biegen
James Boyden
Francis Casella
Paul Chambers
Herbert Church-Smith
Ann Cleary
Robert R. Cotten
Denton Covert, Jr.
Charlie Croll
Ted Czupryna
Ed Daub
Mary Diegert
Frank DiStefano
Alan Dixon
Edward Dougherty
Patricia Durfee
Blaine Ellis
Florence Ewanow
Martha Fenty
Joan Foley
Marion A. Forbes
Sarah Frankland
Gerald F. Freeman
Joseph Gay
Ernest Giordani
Morton Goldberg
Norman Herbert
Howard Herzog
Harold Hickey
Evelyn A. Katusak
Robert A. Keller
Carmelita Keyes
Milton Kirkpatrick
Stephen Korducavich
Mary Kushner
Ludwig Lange
Stanley Lee
Mary Lehman
Richard J. Leo
David Levee
Russell Littlefield
Margaret Luciano
R. Bruce MacGregor
Jo Anne Maniago
Barbara Marckx
Elizabeth K. Marecek
William Matechak
Joseph Milensky
Mary More
Robert T. Newcomb
Michael T. Orinik
Shirley Osmun
Janet Poland
Robert L. Reid
Charles Ricker
Douglas W. Rittenhouse
Jonathan Rook
Irvin C. Simser
Arthur Stankevitz
Stephen Steele
David Sterling
Ruth Stratton
Suzanne Sullivan
Harold Sunshine
W. Porter Swift
Maryann Throup
Edward F. Troicke
D. Elsie Wager
David Walsh
Patricia L. Weller
Floyd R. West
Ozmun Winters
Angelo Zuccolo

# Index


**A**

About BCC, 6-8
Absence Due to Religious Beliefs, 26
Advising Services, 34
Academic Counseling and Advisement Staff, 163
Academic Grievance Procedure, 23
Academic Information, 20-31
Academic Preparation for Admission, 12-13
Academic Programs Section, 41-104
Academic Progress, 23
Academic Standards for Clinical Education, 11, 23
ACCESS Center, 34
Accident Insurance, 14
Accounting Program, 41
  Courses, 114-115
Accreditation, 4
Acting, 83
  Courses, 161-162
  General Studies Sequence in, 83
Adding a Course, 25
Administration Staff, 157
Admissions, 9-13
  Academic Preparation for, 12-13
  Admissions Procedures, 9
  Chart for High School Preparation, 12, 13
  Early, 9
  For Part-Time Students, 31
  Information, 9
  Procedures, 9
  Requirements for, 12-13
  Special, 9
Advanced Placement Exam, 11
Advisement, 34
Alcohol & Substance Abuse Counseling (Chemical Dependency) Program, 48
  Courses, 108-109
Alternative Learning, 27-29
Alumni, 8
Anthropology Courses, 106
Applicants,
  International, 10
  without High School Diplomas, 9
Application for Financial Aid, 17
Art and Design, 83-84
Art Courses, 106-108
  General Studies Sequence in, 83-84
Art Exhibition, Annual Student, 38
Associate Degrees, 20
Athletics, 37
Attendance Regulations, 26
Auditing Courses, 24, 29

**B**

B.C. Center (Childcare), 33
Baccalaureate Transfer within Liberal Arts, 30, 83-87
Band, 38
Banking Courses, 113-114
Biological Sciences Courses, 110-111
Board of Trustees, BCC, 157
  SUNY, 156
Book Expenses, 15
Book Store, 33
Books, Supplies, Uniforms, and Other Expenses, 15
Broome Community College Facts About, 6-8
Business Administration Programs, 42-43
  Courses, 114-117
Business Information Management, 44-46
  Courses, 110
Business Information Technology
  Courses, 111-113
Business Skills Certificate, 47

**C**

Calendar for 2003-2005, 176
Campus-Based Financial Aid, 17
Campus Setting, 7
Campus Shop, 33
Campus, The, 7
Career Planning, 34
Cecil C. Tyrrell Learning Resources Center (LRC), 32
Certificate of Residence, 14
Certificate Programs, 22
Changing Curriculum, 25
Cheating, 26
Chemical Dependency Counseling, 48
  Courses, 108-109
Chemistry Courses, 118-119
Child Care, 33
Choir, 38
Civil Engineering Technology, 49
  Courses, 119-120
Classroom Decorum, 26
Classroom Practices, 26
Clinical Education,
  Academic Standards for, 11, 23
Clubs, 37
Code of Conduct, 38
College Fees, 14
College History, 7
College Level Examination Program (CLEP), 28
College Mission, 6-7
College-on-the-Weekend, 15, 28
College Orientation Course, 120
College Proficiency Exams, 11
College Values, 7
College Vision, 6
Communication and Media Arts, 50
  Courses, 120-121
Community Colleges in State University, 156
Community Education,
  Center for, 8
Community Internship Course, 123
Computer Aided Design (CAD) Courses, 119-120, 128, 140-141
Computer Information Systems, 51
  Courses, 122-123
Computer Science, 52
  Courses, 122-123
Computer Services, 7
Computer Technology, 53
  Courses, 122-123
Computing Resources, 7
Cooperative Programs with other Colleges, 31
Corporate Service Programs, 8
Corrections, Criminal Justice, 54
  Courses, 121
Counseling, 34
  Academic, 34
  Career, 34
  Disabled Students, 34
  Human Development Courses, 34
  Personal, 34
  Transfer, 34
  Workshops, 34
Course Description Section, 105-154
Course Placement, 9
Credit by Examination (CBE), 11, 28
Credit Equivalent Courses, 26
Credit Equivalent Hours
  Students Carrying 12 or More, 14
  Students Carrying Fewer than 12, 14
Credit Evaluation, 11
  Fee, 14
Credit for Experiential Learning, 28
  Fees, 14
Credit for Prior Learning, 14, 28
Credit,
  Transfer, 11
Credit Overload, 25
Criminal Justice, Corrections, 54
  Courses, 121
Criminal Justice, Police, 55
  Courses, 121
Criminal Justice, Transfer, 76
Curriculum Organizations, 37

**D**
Deaf/Hard-of-Hearing Program, 33
Dean's List, 24
Declaration of Graduation Candidacy, 22
Degrees Granted, 20
Degree Requirements, 20
Dental Hygiene, 56
  Courses, 124
  Expenses, 14-15
Deregistration for Non-Attendance, 26
Desktop Publishing Certificate, 44
Developmental Courses, 27
Diagnostic Testing
  and Course Placement, 9
Dietary Manager Certificate, 57
  Courses, 124-125
Disabled Students Support Services for, 33
Dismissal from the College, 23
Distance Learning, 29
Drama and Theater Group, 38
Dropping a Course, 25
Dual Degree, 22

**E**
Early Childhood, 58
  Courses, 125-126
Early Admissions Program, 9
Economics Courses, 126
Educational Opportunity Program (EOP), 18, 34
  Staff, 164
Educational Rights and Privacy Act, 4
Electrical Engineering Technology, 59
  Courses, 126-127
Electrical Technology (proposed program), 60
  Courses, 126-127
Elementary Education,
  General Studies Sequence in, 84-85
  Preparation and Certification, 87
Emergency Medical Technology/Paramedic, 61
  Courses, 128
Employment, 19, 35
  Federal Work-Study, 17, 19
Engineering Science, 62
  Courses, 127-128
English Courses, 128-129
English as a Second Language, 129-130
Entrance Requirements, 12-13
Entrepreneurship,
  Marketing/Management/Sales, 90
Environmental Science and Forestry, 31
Estimating Expenses, 15-16
Evaluation, 11
  Credit, 11
Evening Weekender Program in Nursing, 97
Expenses, 14-15
Experiential Learning, 28
  Credit for, 28
  Fees, 14

**F**
Faculty, 158-166
Federal and State Grants, 17-19
Federal Campus-Based Aid, 17
Federal Work-Study, 19
Fee Refund Policy, 15
Fees, 14-16
Financial Affairs Staff, 157
Financial Aid, 15-18
  Campus Based, 17
  Family Resources, 16
  Funding Dates, 17
  How to Apply, 17
  Notification of Decisions, 18
  Packaging Policy, 17
  Refund Policy, 18
  Rights, Responsibilities for Recipients, 16-17
  Time Frame, 19
  Tuition Deferred, 16
  Verification, 18
Financial Services Program, 63
  Courses, 114-115
Fine Arts, 83, 84
Fire Protection Technology, 64
  Courses, 130
Flute Ensemble, 38
Foundation (The Broome Community College
  Foundation, Inc.), 7, 165
French Courses, 130
Fresh Start, 25
Full Opportunity Program, 11
Funding Dates,
  Financial Aid, 17

**G**
G.E.D., 9
General Education Requirements, 20-21
General Studies Degree Programs and
  Sequences, 83-87
Geography Courses, 131
German Courses, 131
Gerontology (Human Services), 69
Goals of the College, 6-7
Grade Point Average, 22-24, 28
  Grades, 23-24
    "I", 24
    "IP", 24
    "S", 24
    "U", 24
    "W", 24
Grades Appeals, 24
Grading Information, 23-24
Graduation, 22
  Declaration of Candidacy, 22
  Requirements, 20-22
  With Honors, 22
Grants, 17-19
  Financial Aid, 16-19
Grievance Procedure, 23
Guaranteed SUNY Transfer, 30

**H**
Health Information Technology, 65
  Courses, 132-133
Health Insurance, 15
Healthcare Management Courses, 131
Health Requirements for Health Programs
  (OSHA Standards), 11
Health Sciences: Individual Studies, 66
Health Services, 33
  Fee, 14-15
Hearing Impaired, Services for, 33
HEGIS Course Numbers, opposite 105
High School Diplomas,
  Applicants without, 9
High School Equivalency (G.E.D.), 9
History Courses, 131-132
History of the College, 7
Honors, Graduation with, 22
  Honors Program, 28, 134
  Requirements - High School Seniors, 28
  Requirements - Non-Traditional or Transfer
    Students, 28
  Societies, 37
Hotel/Restaurant Management, 67
  Courses, 109-110
How to Apply for Financial Aid, 17
Human Development Courses, 151
Human Services Program, 68
  Courses, 133-134
Human Services/Gerontology Program, 69
  Courses, 133-134
Humanities Courses, 134

**I**
Immunization Requirements, 10
Independent Study, 28
Individual Studies, 91
Industrial Technology Certificate
  Sequences, 75
  Civil/Construction/CAD, 75
  Mechanical/CADCAM, 75
Industrial Technology Sequences, 73-74
  Mechanical/CADCAM, 70
Industrial Technology/Quality Assurance, 72
  Courses, 152-153
Institutional Campus-Based Aid, 17
Insurance for Students, 14-15
Intercollegiate Sports, 37
Interdisciplinary Seminars, see Honors
  Program, 134
Interior Design General Studies Sequence, 84
  Courses, 134
International Applicants From Other
  Nations, 10
    Admission Requirements, 10
    General Information, 10
    Other Requirements, 10
    Residency Requirements, 14
International Business Program, 43
International Student Advisor, 34
International Students,
  Insurance, 10, 15
International Studies Program, 29
Intramural Sports, 37
Italian Courses, 134

**J**
Jazz Ensemble, 38
Jobs, Placement, 34-36
Joint Degree Programs with Binghamton
  University and other Colleges, 30-31

**L**
Laboratory Fees, 14
Late Registration, 25
  Fee, 14
LAUNCH Program, 34
Law Courses, 135
Learning Assistance Center, 27
  Staff, 164
Learning Disabilities Program, 27
Learning Skills Courses, 137
Learning Resources Center, 32
Leave of Absence, 23
Length of Curriculums, 25
Letter Grade System, 23-24
Liberal Arts, Individual Studies, 88
Liberal Arts & Human Services
  Courses, see under each heading
  Model Career Programs, 79-82
  Transfer, 83-87
Liberal Arts Undecided: Career Horizons
  (LAUNCH), 34
Library, 32
Life Planning, 34
Literature Courses, 135, 137
Loans, 19
  Financial Aid Time Frame, 19

**M**
Map of Campus, inside back cover
Management, 89
  Courses, 114-117
Marketing/Management/Sales, 90
  Courses, 114-117

Marketing Programs, 90-91
Mathematics Courses, 137-139
Lab, 27
Matriculation Fee, 14
Measles Immunization Regulations, 10
Mechanical Engineering Technology, 92
Courses, 140-141
Medical Assistant, 93
Courses, 139-140
Medical Insurance, 15
Medical Laboratory Technology, 94
Courses, 141-142
Medical Transcription Certificate, 95
Medical Withdrawal, 25
Mission & Goals Statements, 6
Mission/Values/Vision, 6
MMR Immunization Regulations, 10
Music, General Studies Sequences, 85-86
Courses, 143-144
Music, Performance, 38

**N**

Name Change, 26
Non-Academic Experiential Learning
Credit for, 28
Non-Credit Programs, 8
Non-Discrimination Commitment, 4
Non-High School Diploma Applicants, 9
Nursing, 96
Evening Weekender Program, 97
Courses, 105-106

**O**

Office Administration, 98
Courses, 111-113
Office Technology Certificate, 99
One-Plus-One Programs, 31
Online Courses, 29
Out-of-State Transfers, 30
Overseas Study Programs, 29
Overseas Study Program Courses, 151

**P**

Packaging Policy, 17
Paralegal, 100
Courses, 135
Paramedic Courses, 128
Partners in Progress, 3
Part-Time Studies, 31
Advisement, 31
Tuition and Fees, 14
Peer Tutoring, 27
Performing Arts, 38, 83-86
Philosophy Courses, 145-146
Phlebotomy, 101
Physical Education Courses, 144-145
Physical Science Courses, 146-147
Physical Therapist Assistant, 102
Courses, 149
Physics Courses, 147
Placement Services, 34
Testing, 9, 11, 31
Placement Exam, 31
Advanced, 11
Placement Statistics: 1998 Graduates, 35-36
Placement Test, Part-time Studies, 31
Police, Criminal Justice, 55
Courses, 121
Political Science Courses, 148
Portfolio Assessment, 28
Fee, 14
President, 157
President's Letter, 1
President's List, 24
Priority Funding Dates, 17
Probation, 23
Professional Society Affiliates, 4, 37
Proficiency Exams, 11
Program-Identifying Numbers, opposite 105
Programs with Other Colleges, 30-31
Psychology Courses, 148-149

**Q**

Quality Assurance, 72
Courses, 152-153

**R**

Radiologic Technology, 103
Courses, 149-150
Reading Skills Courses, 150-151
Lab, 27
Readmittance, 23
Records Information Management Program
(Certificate), 45
Courses, 110-113
Refugees, Residency, 14
Refund Policies and Procedures, 15
College on the Weekend, 15
Financial Aid, 18
Refund Procedure on Tuition, 15
On Fees, 14
Registration, 25
Religious Reasons for Absence, 26
Repeating Courses, 24
Residency Certificate, 14
Broome County Residents, 14
Dependent Students, 14
International Students, 14
Out-of-County Residents, 14
Part-time Students, 14
Refugees, 14
Resident Requirements, 14
Returned Check Fee, 14
Rights and Responsibilities of Financial Aid
Recipients, 16-17
Room and Board, 16
Russian, 151

**S**

Satisfactory Academic Progress (TAP, APTS,
Title IV Aid), 18
Science Option of Liberal Arts Curriculum, 74
Scholarships, 18, 19
Semester Abroad Programs, 29
Senior Citizens, Audits, 29
Service Learning, 28
Sign Language Courses, 109
Social Science Courses, 151-152
Sociology Courses, 151
Spanish Courses, 152
Special Admissions Programs, 9-10
Special Assessment of Experiential
Learning, 28
Special Transfer Programs, 30-31
Speech Courses, 152
Sponsor of the College, Broome County, 157
Sports, 37
State Grants, 17-18
State University of New York, 155, 156
STRIVE Program, 10, 166
Student Activities, 37
Fees, 14
Student Affairs Courses, 151
Student and Family Resources, 16
Student Assembly, 38
Student Behavior, 38
Student Fees, 14
Student Government, 38
Student Health Service Fee, 14-15
Student Health Services, 14, 33
Student Life, 37-38
Student Name Change, 26
Student Organizations, 37
Student Services, 32-36
Student Status, 25
Student Support Services Program, 33
Students From Other Nations, 10
Study Abroad Programs, 29, 151
Study Skills Lab, 27
Substance Abuse Counseling,
Human Services, 48
Summer Session, 15, 29
SUNY Transfer, 30-31
SUNY Trustees, 156
Supplemental Instruction, 27
Supply Expenses, 15
Support Services for Students with
Disabilities, 33

**T**

TDD/TTY Telephones, 2, 3, 33
Teacher Preparation and Certification, 87
Telecommunications Technology, 104
Termination from Full-Time Studies, 25
Testing,
Accommodations, 26
Diagnostic, 9
Theater Courses, 153-154
Student Group, 37-38
Theater Sequence, General Studies, 86
Theatre/BCC, 38
Title IV Financial Aid Refund Policy, 15
Title IV Refund Fee, 15
Transfer,
Counseling, 34
Credit, 11
Programs, 30-31, 42, 43, 50, 52, 54, 62, 74-86
To Broome Community College, 11, 20
To Senior Institutions, 30-31
Trustees of the College, 157
Trustees, SUNY, 156
Tuition, 14
Assistance Programs, 18-19
Deferral Payment, 16
Deposit Policy, 14
Refund Policy, 15
Tutoring, 27
Tyrrell, Cecil C. Learning Resource Center, 32

**U**

Uniform Expenses, 15

**V**

Varsity Sports, 37
Verification, 18
Veterans, Financial Aid, 18
Vision, Mission, and Values Statement, 6-7
Visual Arts, 83-84

**W**

Waiver of Degree Requirements, 22
Website Development and Management
Certificate, 46
Weekend Courses, 15, 28
Weekend Services, 29
Withdrawal from the College, 25
Withholding Diplomas and Transcripts, 15
Withholding of Grades, 15
Writing Center, 27
Writing Emphasis "W" Courses, 22
Work Opportunities, 19
Work Study, 19

**X**

X-Ray Technology, 103
Courses, 149-150

# Academic Calendar

## 2003-2004

### Fall 2003

Aug 18 - 22 ..... Final Registration Week
Aug 25 ..... First Day of Classes
Sep 1 ..... Labor Day – No Classes
Oct 13 - 14 ..... Mid-Semester Break
Nov 26 - 28 ..... Thanksgiving Break
Dec 15 ..... Last Day of Classes
Dec 16 ..... Reading Day
Dec 17 - 19 ..... Final Exams

### Spring 2004

Jan 12 - 16 ..... Final Registration Week
Jan 20 ..... First Day of Classes
Feb 25 - 27 ..... Mid-Semester Break
Apr 12 - 16 ..... Spring Break
May 14 ..... Last Day of Classes
May 17 - 19 ..... Final Exams
May 21 ..... Graduation

## 2004-2005

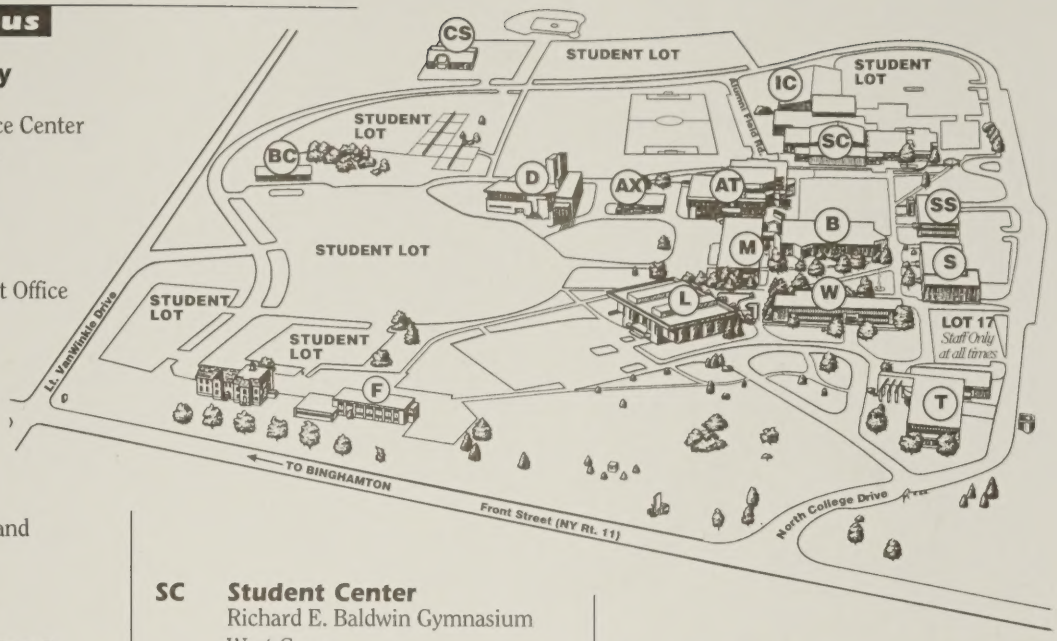
### Fall 2004

Aug 16 - 20 ..... Final Registration Week
Aug 23 ..... First Day of Classes
Sep 6 ..... Labor Day – No Classes
Oct 11 - 12 ..... Mid-Semester Break
Nov 24 - 26 ..... Thanksgiving Break
Dec 13 ..... Last Day of Classes
Dec 14 ..... Reading Day
Dec 15 - 17 ..... Final Exams

### Spring 2005

Jan 10 - 14 ..... Final Registration Week
Jan 18 ..... First Day of Classes
Feb 23 - 25 ..... Mid-Semester Break
Mar 28 - Apr 1 ..... Spring Break
May 13 ..... Last Day of Classes
May 16 - 18 ..... Final Exams
May 20 ..... Graduation

## Map of the Campus




**AT** **Applied Technology Building**
Harry D. Prew Conference Center
Computer Studies Office
Electrical Engineering Technology Office
Engineering Science & Physics Office
Mathematics Department Office
Applied Sciences Divisional Office

**AX** **Arts Annex**
Art Studios
Music Studios

**B** **Business Building**
Business and Business Technologies Divisional and Departmental Offices
Computing Resources
Information Resources

**BC** **B.C.Center (Child Care)**

**CS** **Campus Services Building**
Bookstore
Copy Center
General Mail Center
Purchasing, Shipping, Receiving

**D** **Dr. G. Clifford & Florence B. Decker Health Science Center**
Dental Hygiene Clinic
Dental Hygiene Office
Health Information Technology Office
Hoyt Conference Center
Medical Assistant Office
Medical Laboratory Technology Office
Nursing Office
Physical Therapy Assistant Office
Radiologic Technology Office
Senator Thomas Libous Training Room

**F** **901 Front Street**
Biological Sciences
Loomis Bird Collection

**IC** **Ice Center**

**L** **Cecil C. Tyrrell Library / Learning Resources Center**
Disabled Student Services
Learning Assistance Center
LRC/Library
Teaching Resource Center

**M** **Mechanical Building**
Civil and Mechanical Engineering Technology Office

**S** **Science Building**
Chemistry Department Office
Student Activities Offices
Student Health Services

**SC** **Student Center**
Richard E. Baldwin Gymnasium
West Gym
Athletics Office
Campus Shop
Faculty/Student Association
Fitness Center
Food Court/Dining Hall
Little Theater
Physical Education Office

**SS** **Student Services Building**
Access Center
Campus Safety
Financial Aid
Finance Office
Registrar's Office
Student Accounts

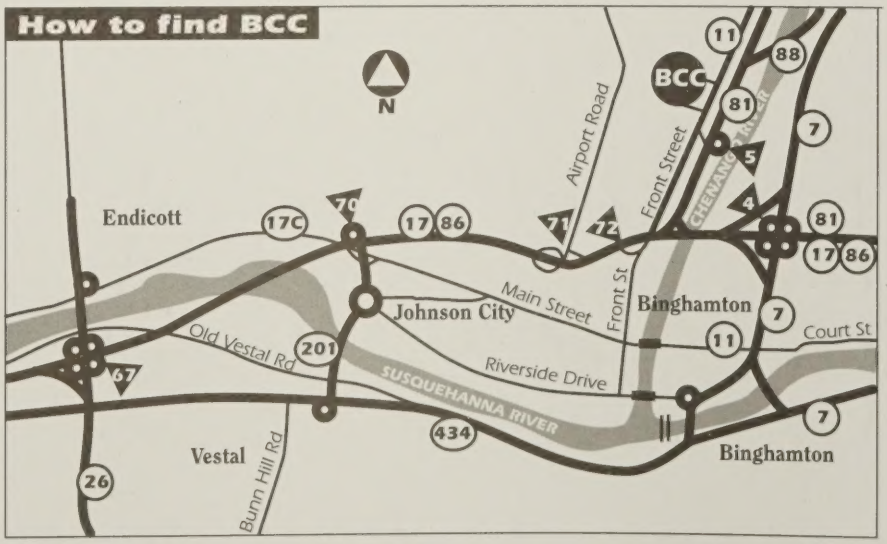
**T** **Paul F. Titchener Hall**
Carl Gitlitz Forum
Communication Arts
Liberal Arts and Human Services Divisional Office

**W** **Darwin R. Wales Administration Building**
Administrative Offices
Admissions Office
Alumni Office
BCC Foundation
Center for Community Education
Human Resources/Personnel/ Affirmative Action
Publications Center

### Parking

All vehicles must be registered with the Campus Security Office. Students are allowed to park only in student lots until 5 p.m. After 5 p.m., parking is allowed in any lot except Staff Lot 17. Parking map and temporary parking passes are available in the Campus Security office, SS-102, or from the receptionist in the Wales Lobby. General parking regulations are in effect at all times:

- No parking is allowed on grass, roadways, or lot perimeters
- No parking is allowed in Handicapped zones without a permit issued by Campus Safety
- Staff Lot 17 is reserved at all times for staff only.



Broome Community College | BCC State University of New York
P.O. Box 1017
Binghamton, NY 13902

*PLEASE NOTE:*
***This is the only copy of the General Catalog that will be provided to you. Please keep it for use during your time at BCC.***